

BOSCH

Installation & Owner's Guide

**32L Electronic
Internal / External Model
KM3211WH
KM3211WHQ**

**To be installed and serviced only
by an authorised person**

**This appliance is not suitable for
use as a pool heater**

The "authorised installing person" is
responsible for:

1. Correct commissioning of this
appliance.
2. Ensure unit performs to the
specifications stated on the
rating label.
3. Demonstrate operation of unit to
customer before leaving.
4. Hand these instructions to
customer.

Service Department: 1300 30 70 37

www.bosch.com.au



This appliance must be installed in accordance with the manufacturer's
installation instructions, AS 5601 (AS5601), NZ 5261, AS3500.4.2 and all
Local Water, Building and Gas fitting regulations.

**Failure to install this appliance in accordance with these installation
instructions may void warranty**

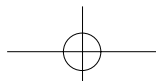
In the interest of continued product improvement, Bosch reserves the
right to alter these specifications without notice.

SAR8191 ③

Rev. 10/11



SAR8191 T



Contents

Contents	2
Owner's Guide	
Important Safety Information	3
General Parts	
Main Unit	6
Names and Functions of Each Parts	7
Initial Operation	9
How to Use	
When using RCM3211	
Clock Adjustment	10
Running Hot Water	11
Setting Hot Water Temperature	12
Filling Up the Bath	14
Circulation Operation	15
Suspension of Circulation	16
Timer Setting Period for Circulation	17
Other Setting Options	20
Confirmation Beeper On/Off	22
When using RCS3211	
Running Hot Water	23
Setting Hot Water Temperature	24
Confirmation Beeper On/Off	26
No remote controller case	
Running Hot Water	27
Preventing Damage from Freezing	28
When Unused for an Extended Period	29
Regular Maintenance	31
Troubleshooting	33
Follow-up Service	37
Specifications	38
External Outfitting	39
Combustion Unit and Gas Route	41
Hot-Water Feed Route	43
Electronic Controller	48
Remote Controller and Attached Set	50
Installation Guide	52
1. Installation Examples	52
2. Quick Connect Multi System Installation	53
3. Before Installation	54
4. Choosing Installation Site	54
5. Installation Clearances	56
6. Installation	57
7. Vent Pipe Installation	58
8. Gas Piping	61
9. Water Piping	62
10. Plumbing Applications	65
11. Electrical Wiring	66
12. Commissioning	69
13. Dimensions	70
Remote Controller Installation Guide	74

Important Safety Information-1

To prevent damage to property and injury to the user, the icons shown below will be used to warn of varying levels of danger.

Every indication is critical to the safe operation of the water heater and must be understood and observed.

Potential dangers from accidents during installation and use are divided into the following three categories. Closely observe these warnings; they are critical to your safety.

Installation Guide

Robert Bosch
(Australia) Pty. Ltd.

GAS WATER HEATER

KM3211WH (Indoor or Outdoor Installation)

KM3211WHQ (Indoor or Outdoor Installation / Instant hot water supply type)

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

Potential dangers from accidents during installation and use are divided into the following three categories. Closely observe these warnings, they are critical to your safety.

 Danger	Danger of serious injury or even death as well as danger of fire when the product is misused by ignoring this symbol.
 Warning	Possibility of serious injury or even death as well as possibility of fire when the product is misused by ignoring this symbol.
 Caution	Possibility of bodily injury or damage to property when the product is misused by ignoring this symbol.



Prohibited



Disconnect
Power



Ground



Be sure to do

Requests to Installers



Caution

- In order to use the water heater safely, read this installation manual carefully, and follow the installation instructions.

- Failures and damage caused by erroneous work or work not as instructed in this manual are not covered by the warranty.
- Check that the installation was done properly in accordance with this Installation Manual upon completion.

This appliance must be installed in accordance with the manufactures installation instructions, AG5601, AS3500.4.2, AS300 wiring regulations and all Local Building, Water and Gas Fitting.

Other icons

 Electric Shock.	 High Temperature.	 Be sure to do.	 Ground.	
 Prohibited	 No flame.	 Don't touch.	 Don't disassemble the equipment.	 Don't touch with a wet hand.

Important Safety Information-2

Warning



If you detect abnormal combustion or abnormal odors:

1. Turn off the hot water supply
2. Turn off the power to the water heater
3. Turn off gas and water at the main
4. Consult the nearest Bosch Agent

This will prevent fire, electric shocks or damage to the unit.



Check the temperature of the running hot water before entering the shower.



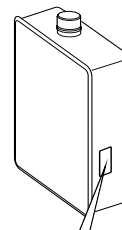
Check the temperature before stepping into the bath tub.



Do not turn off the water heater or change the water temperature while someone is using the hot water.



Be sure the gas/power supplied matches the gas on the rating plate.



For Natural Gas

BOSCH

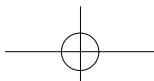
MODEL KM3211WHQ
GAS TYPE NG
GAS CONSUMPTION 250 MJ/hr
HEAT OUTPUT 55.5 kW
ELECTRICAL RATING AC240V 50Hz
RATED POWER 135 W
HOT WATER SUPPLY CAPACITY 32L/min RAISED 25°C
GAS PRESSURE TEST POINT 0.68 kPa
WATER PRESSURE MAX : 900kPa



Do not allow small children to play unsupervised in the bathroom.
Do not allow small children to bathe unsupervised.



Contact a qualified service technician for any necessary repairs, service or maintenance.

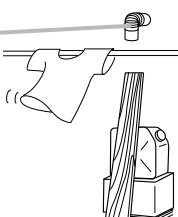


Warning

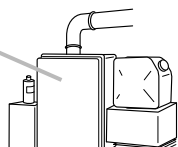


Do not place combustibles such as laundry, newspapers, oils etc. near the heater or the exhaust vent terminal.

Exhaust vent terminal (indoor installation)



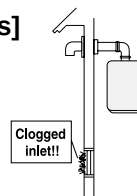
Unit



Do not use combustible chemicals such as oil, gasoline, benzene etc. in the vicinity of the heater or the exhaust vent terminal.



[When installing indoors]
Where Applicable:
Check the air supply vent for dust or obstructions.



Leave the proper clearance between the water heater and nearby objects (trees, timber, boxes with flammable materials etc.).

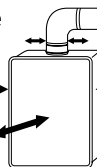
Min. 75mm from vent pipe

Left side:

Min. 50mm

Front:

Sug. 600mm*



Right side:

Min. 50mm

* Indicates suggested clearances for maintenance.



Do not place or use a spray can near the heater or the exhaust vent terminal.

Caution



Be sure to electrically ground the unit.



Do not touch the power cord with wet hands.



Keep power cord free of dust.



Do not use a broken or modified power cord. Do not bind, bend or stretch power cords. Do not scratch, modify, or subject them to impact or force.



Do not use the water heater for other than its intended use.



Do not touch the exhaust vent pipe during or immediately after operation of the water heater.



Do not use hair spray or spray detergent in the vicinity of the heater.



Do not install in salons or other locations where hair spray or other aerosols will be used.



Do not install in locations where excessive dust or debris will be in the air.

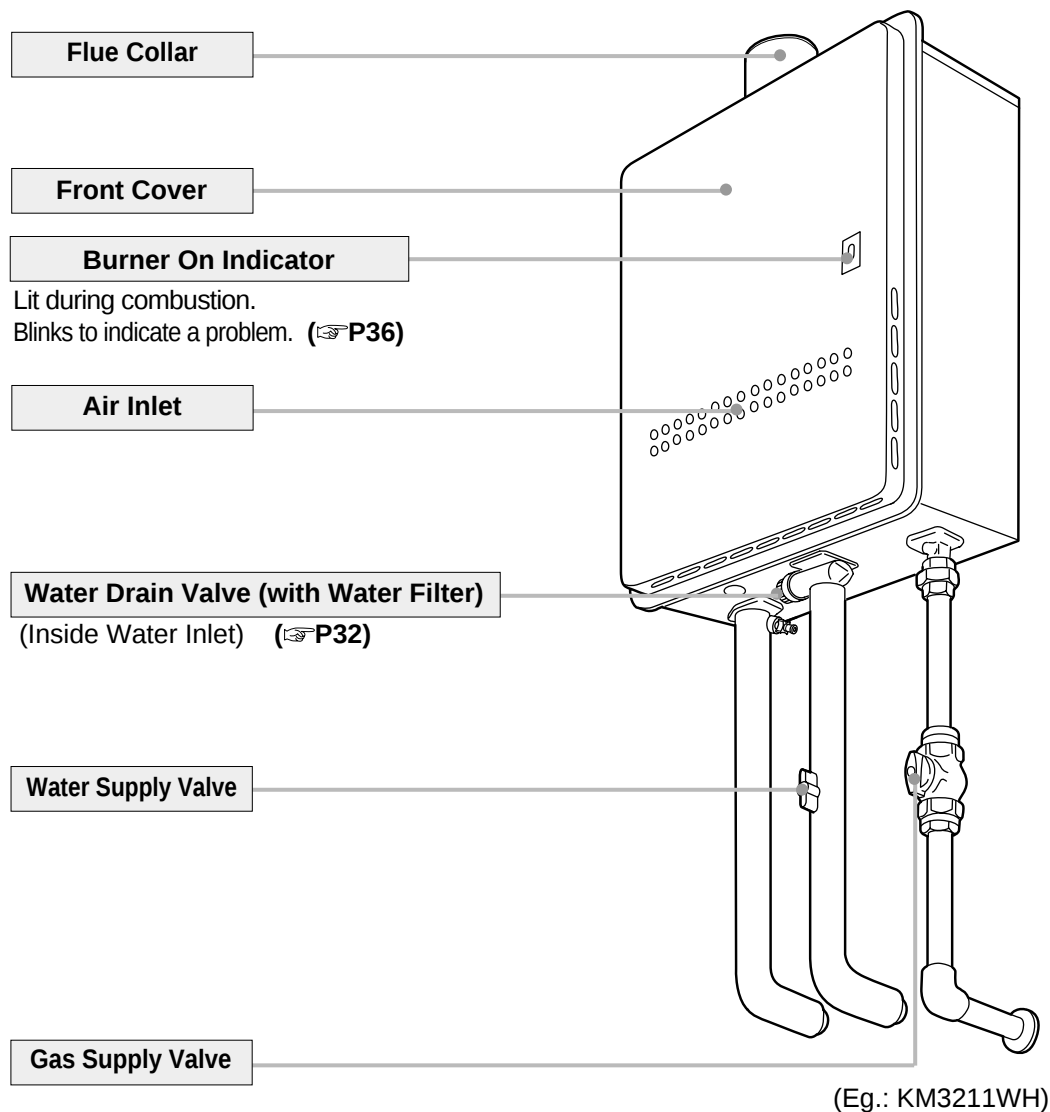
General Parts

Main Unit

Indoor or Outdoor Wall Mounted, Power Vented Model

KM3211WH, KM3211WHQ

* KM3211WH shown, pipe arrangement differs slightly on the KM3211WHQ model.

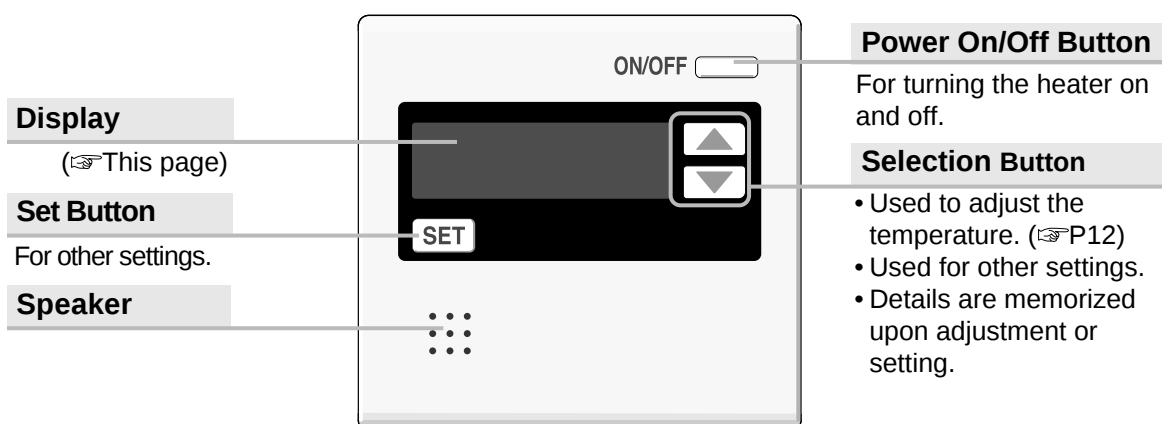


* The above illustration shows an example of installation.
The exact installation configuration may be slightly different.

Names and Functions of Each Parts-1

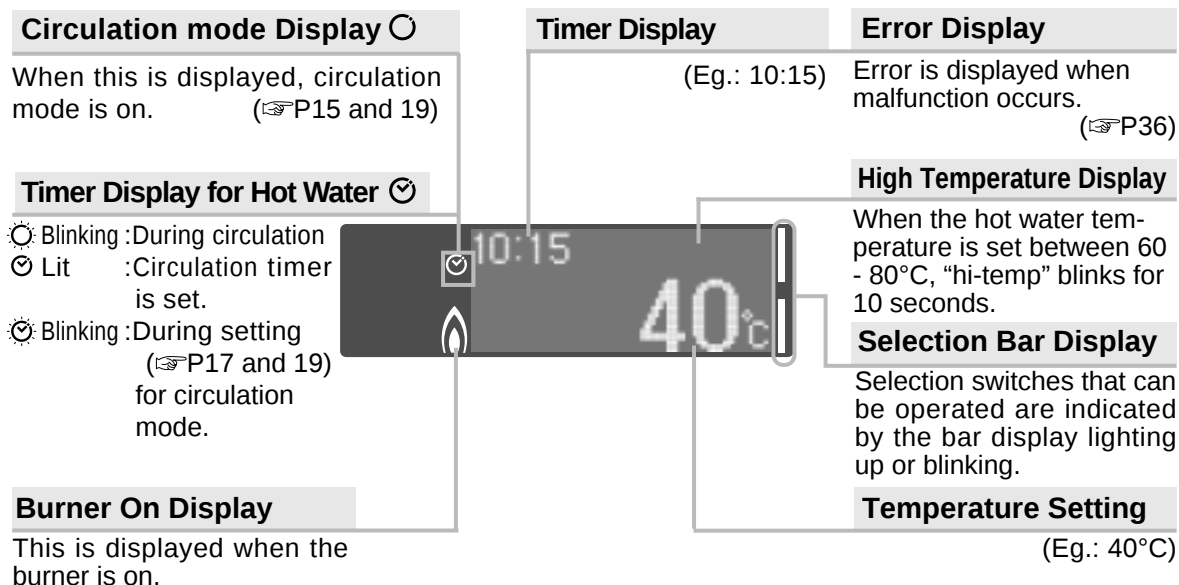
Main Remote Controller (RCM3211) <Included/Optional>

* This remote controller is basically used with KM3211WHQ.



● Display ●

The illustration below shows the remote controller display. What is actually displayed depends on how the water heater is set.



● < Scroll display > to prevent the remote controller screen from burning out ●

- * In order to prevent the screen burning out, about 10 minutes after any remote control operation, the screen display begins to scroll sideways.
- * As soon as the remote controller is used again, the scrolling stops.



Current time (when the clock is set) the hot water temperature scrolls sideways.

Names and Functions of Each Parts-2

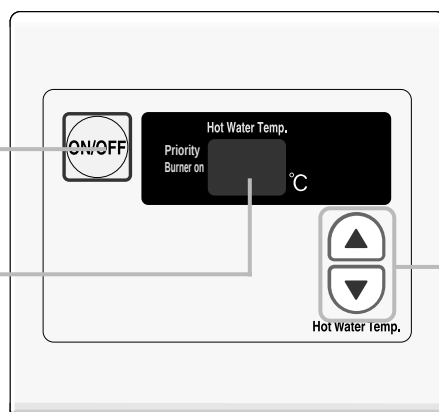
Waterproof Sub Remote Controller (RCS3211) <Optional>

Power On/Off Button

For turning the heater on and off.

Display

(☞ This page)



Temperature setting Button

• Used to adjust the temperature. (☞ P24)

● Display ●

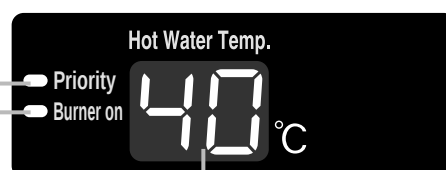
The illustration below shows the remote controller display. What is actually displayed depends on how the water heater is set.

Priority Indicator

When this indicator is lit, the hot water temperature can be set.

Burner On Indicator

This is displayed during burner on.



Temperature Setting

(Eg.: 40°C)

Error Display

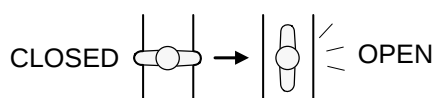
Error is displayed when a malfunction occurs. (☞ P36)

Initial Operation

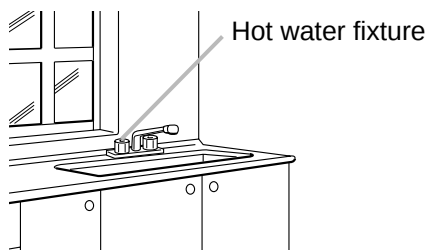
Before the first use of your water heater, make the following preparations.

Follow steps **1 through 4**.

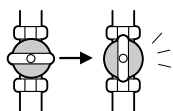
1 Open the water supply valve.



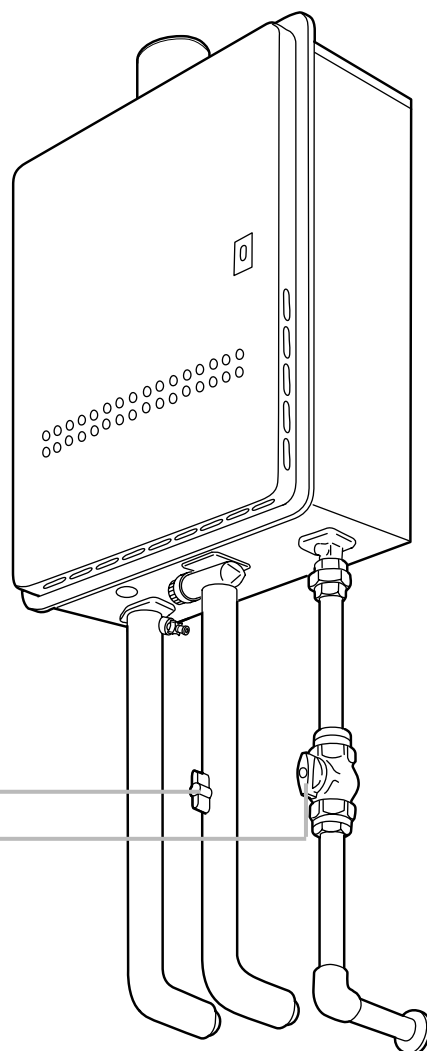
2 Open a hot water fixture to confirm that water is available, and then close the fixture again.



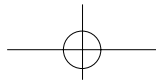
3 Open the gas supply valve.



4 Turn on the power.

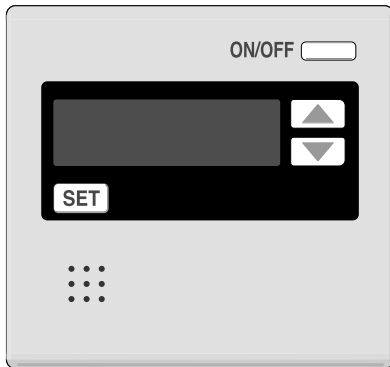


(Eg.: KM3211WH)



When using RCM3211

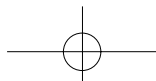
Clock Adjustment



On this Display	Operation	Description
1	Press the ON/OFF button to turn it "On".	* The ON/OFF is lit. * When Circulation is on, the symbol blinks and circulation mode starts automatically. (P15) < Display detail >
2 (Eg.: 40°C)	Press the SET button to change the display until "time set" is shown.	
3 (Eg.: AM 10:15)	Use the buttons to adjust the clock. < Completion of setting >	* The time changes in 1-minute increments with each press on the button, and then in 10-minute increments if the button is kept pressed down. * When the SET button is pressed, or the console is left untouched for about 20 seconds, the settings screen ends.

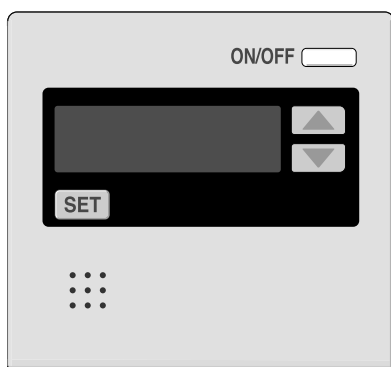


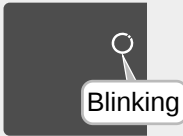
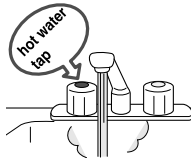
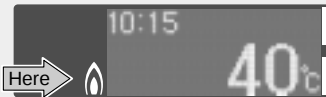
In the event of a power cut or after disconnecting the power supply, when the power is restored, the clock on the display screen shows "0:00", so the clock needs to be re-set.



When using RCM3211

Running Hot Water



On this Display	Operation	Description
1 	Press the ON/OFF  button to turn it “On”.	* The ON/OFF  is lit. * When Circulation is on, the  symbol blinks and circulation mode starts automatically. (→P15) < Display detail > 
2  Previous set temperature (Eg.: 40°C)	Turn on hot water. 	* This is lit during combustion.  (Display example)



WARNING



Whenever using the hot water, such as when using the shower, check the temperature shown on the remote controller first, and then test the hot water temperature by hand.

Be especially careful if using hot water after previously using water at 60°C or above to prevent scalding.



WARNING

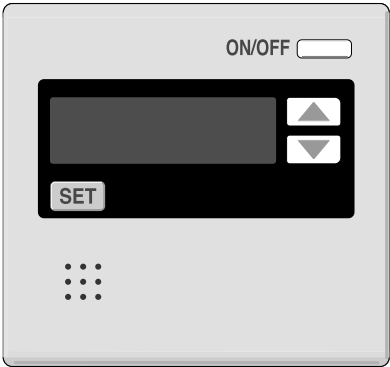


While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned “off”. (when using sub remote controller.)

This is to prevent scalding if the temperature rises. Conversely, if the temperature drops or the power switch is turned “off”, the user may be upset when the water suddenly becomes much colder.

When using RCM3211

Setting Hot Water Temperature



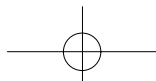
On this Display	Operation	Description
1	Press the ON/OFF button to turn it “On”.	* The ON/OFF is lit. * When Circulation is on, the symbol blinks and circulation mode starts automatically. (P15)
2 (Eg.: 40°C)	Use the buttons to adjust the temperature.	

WARNING



While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned “off”. (when using sub remote controller.)

This is to prevent scalding if the temperature rises. Conversely, if the temperature drops or the power switch is turned “off”, the user may be upset when the water suddenly becomes much colder.



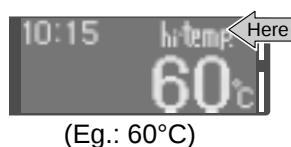
● Approximate hot water conditions ●

(°C)																		
37	38	39	40	41	42	43	44	45	46	47	48	50	55	60	65	70	75	80
Set the maximum temperature to suit your own preference. (→ P20 and 21)																		
Washing dishes, etc.		Shower, hot water supply, etc.				Hot water supply, etc.						High temperature						

- Hot water temperatures are approximations, and may differ from actual temperatures depending on external factors, such as the season and length of piping involved.
- When low temperatures are set (for washing dishes, etc.), if the ambient water temperature is already quite high, it may be difficult to ensure the resultant water temperature is as per the setting.
- When the hot water temperature is adjusted using thermostat-controlled water mixing valves, set the temperature on the remote controller to about 10°C higher than that required to ensure the appropriate temperature.

● When setting high temperatures (60 - 80°C); ●

- When a high temperature is set, the readout on the right is shown.
- Please check the temperature displayed before using any hot water.
Be especially careful using any hot water after any previous setting of between 60 - 80°C.

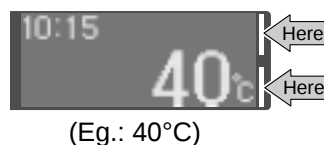


(Eg.: 60°C)

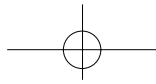
Temperature display flashes for about 10 seconds to indicate high temperature.

● Please switch to the priority setting if the temperature cannot be adjusted (when an additional remote controller is attached). ●

- If the power switch on the remote controller is turned "on", the remote controller has priority in adjusting the temperature.
- When the temperature can be adjusted (console has priority), the display screen is shown as per right.
- If the temperature cannot be adjusted, turn the power switch to "off", and then turn it "on" again.

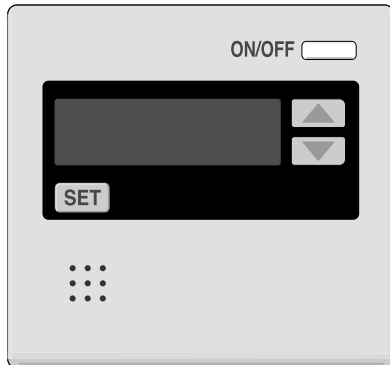


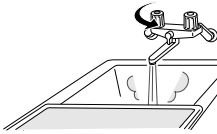
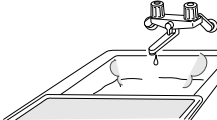
(Eg.: 40°C)



When using RCM3211

Filling Up the Bath



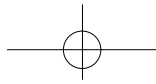
On this Display	Operation	Description
Preparation 1. Insert the bathplug into the plughole.		
1 	Press the ON/OFF  button to turn it “On”.	* The ON/OFF  is lit. * When Circulation is on, the  symbol blinks and circulation mode starts automatically. (→ P15)
2  (Display example)	Turn on hot water. 	* Please set to the highest temperature when using thermostat controlled water mixing valves. 
3 When the bath is full, turn off the taps.		

 **WARNING**



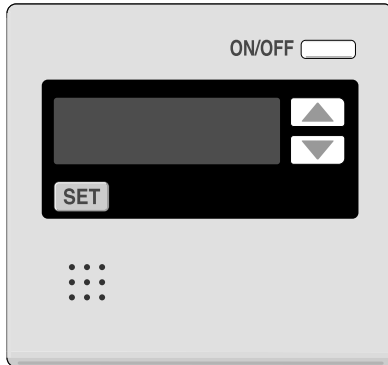
Check the bathwater temperature with your hand before getting into the bath.

To prevent scalding.



When using RCM3211 Display of  on the remote controller

Circulation Operation



- * Instant hot water operation means that water within the hot water supply line is to be heated, and enables hot water to be supplied instantly.
- * If  is not displayed on the remote controller, circulation is not available.

On this Display	Operation	Description
1 	Press the ON/OFF  button to turn it “On”.	* The  symbol blinks and circulation mode starts automatically.
 Previously set hot water temperature (Eg.: 40°C)		* See Pages 12 - 13 for details on how to adjust the temperature. * When the temperature is set at 65°C or above, the temperature of circulation water will be at 60°C.

WARNING



When reducing the temperature setting from very high during instant hot water operation, be wary of the actual temperature.

To prevent scalding.
Even after the temperature is changed, very hot water remains within the pipe.

WARNING

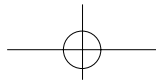


When “priority” is switched to the remote controller during circulation

Hot water circulates at the temperature set by the remote controller with priority right.

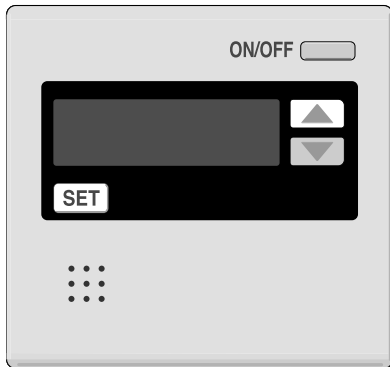


Hot water temperatures are approximations, and may differ from actual temperatures depending on external factors, such as the season and length of piping involved.

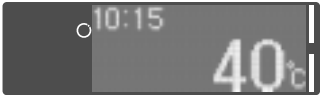
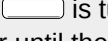


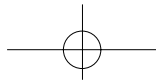
When using RCM3211 Display of  on the remote controller

Suspension of Circulation



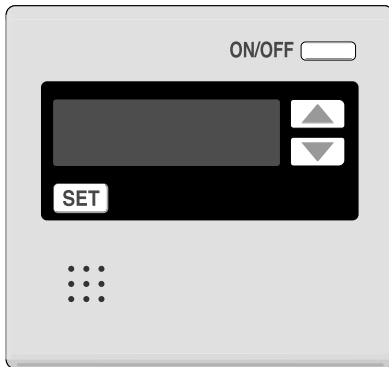
When the hot water tank circulation system is used, do not stop the circulation mode.
If you are unsure how to use such a system, please contact the retailer.

On this Display	Operation	Description
1  (Eg.: 40°C)	Press the  button to change the display to “pre-heat”.	
2 	Press the  button until “off” is blinking.	* The  symbol is no longer displayed, circulation mode stops.
	< Completion of setting >	* When the  button is pressed, or the console is left untouched for about 20 seconds, the settings screen ends. * Circulation stops until the ON/OFF  is turned “On”, again or until the next timer setting.



When using RCM3211 Display of  on the remote controller

Timer Setting Period for Circulation-1



When a timer period is set, circulation mode will automatically turn on during that time.

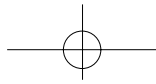
Until the timer operation is canceled ( P19), circulation operates during the same period every day.

When using a hot water storage tank circulation system, do not set the timer for instant hot water operation.

If you are unsure how to use such a system, please contact the retailer.

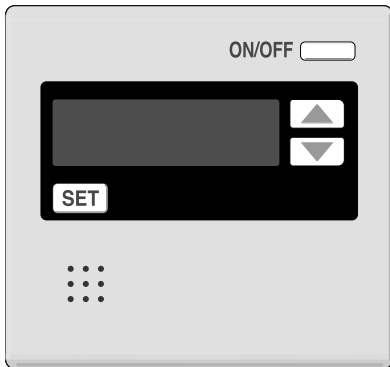
On this Display	Operation	Description
Preparation		
An example of using hot water from 6:00 a.m. to 9:00 p.m. is described.		
1. Check the temperature settings. 2. Check that the current time is correct.		
1 	Press the ON/OFF  button to turn it “On”.	* The ON/OFF  is lit. * The  symbol blinks and circulation mode starts automatically.
2 	Press the  button to change the display to “pre-heat”.	
3 	Use the  button to select the “cycle”.	
4 	Press the  button until the  is set to “AM 6 - 7”.	

(Continued)

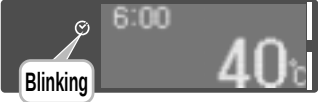
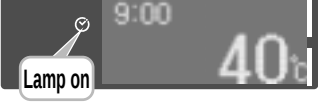


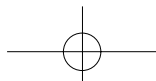
When using RCM3211 Display of  on the remote controller

Timer Setting Period for Circulation-2

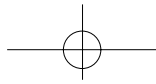


(Continued)

On this Display	Operation	Description
5 	Press the  button several times, until the  is set to "PM 8 - 9".	* Circulation operates during the period set by the  .
	< Completion of setting >	* When the  button is pressed, or the console is left untouched for about 20 seconds, the settings screen ends. * If the clock is not adjusted, the screen for clock adjustment will be shown. (→ P10) * The setting details will show the on/off run time of the circulation pump. Note; the circulation pump will commence operation in the next run time period.
Circulation starts 		* Circulation starts. * ON/OFF  automatically switches "ON."
Circulation stops 		* Circulation ends. * ON/OFF  will not be turned "OFF" automatically.
When the operation switch is turned "Off"  About 1min. later  unlit		* About 1min. later the  will not be displayed, but it will have the memory of the timer setting.

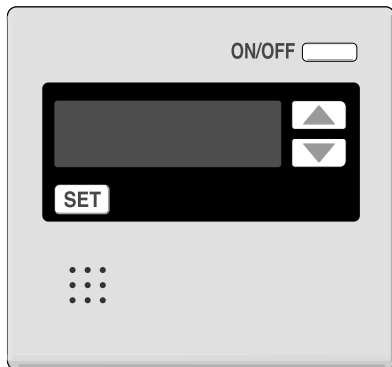


On this Display	Operation	Description
●Modification of the timer setting		
Cancel the settings as per the following “Cancellation of timer operation” procedure, and then re-set in accordance with the procedure detailed on Pages 17 - 18.		
●Confirmation of timer setting		
Follow procedures 1 - 2 of “Cancellation of timer operation”, and check the timer setting on the screen under procedure 3.		* Pressing the SET button, or leaving it unattended for about 20 seconds, finalizes the confirmation screen.
●Cancellation of timer operation (when instant hot water is regularly operated)		
1	Press the SET button to change the display to “pre-heat”.	
2	Use the button to select the “cycle”.	* “Cycle-on” is displayed instantly.
3	Use the button to select “Cancel”.	* The timer settings are memorized even after being cancelled.
	< Completion of cancellation >	



When using RCM3211

Other Setting Options



Switching scroll display

Scroll display (P7) can be switched on = "yes" or off = "no".

Draining the unit

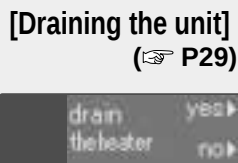
This is set to drain the unit.

On this Display

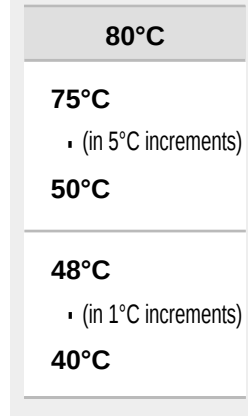
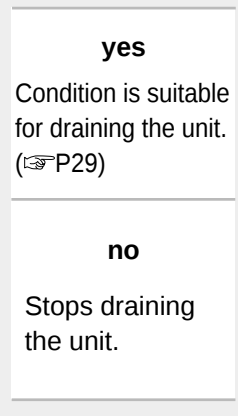
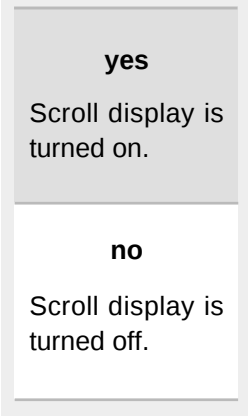
1



2



3



 = Initial setting < factory setting >

Modification of the maximum temperature setting

The maximum temperature setting can be modified.

On this Display

Operation

* This may not be displayed depending on the installation conditions.

system yes
diagnosis

Power is switched "Off" again.

* This is only used for installation and maintenance purposes, so please do not touch.

① Press the ON/OFF button to "OFF".

② Press the button to show the settings screen.

Press the button to select the setting to be modified.

(Setting changes each time the button is pressed.)



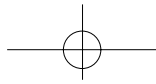
Use the buttons to modify the setting.

(Setting changes each time the button is pressed.)

< Completion of setting >

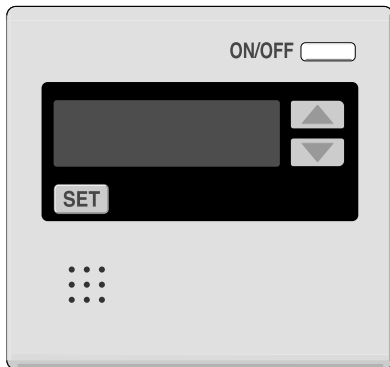
* When the button is pressed, or the console is left untouched for about 20 seconds, the settings screen ends.

* Repeat procedures 2 - 3 again to adjust other settings.



When using RCM3211

Confirmation Beeper On/Off



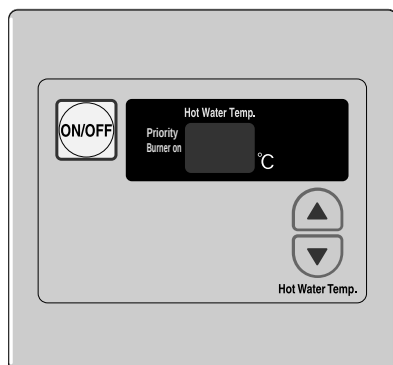
The remote controller will emit a sound when any button is pushed. This sound can be muted if it is desired.

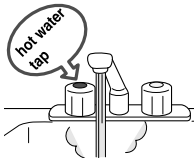
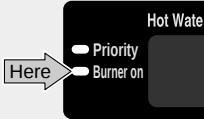
* Initial factory setting is with sound.

Operation	Description
1 Press the ON/OFF ☐ button for about five seconds. < Completion of setting >	* Setting is possible regardless of whether the power switch is ON/OFF.

When using RCS3211

Running Hot Water



On this Display	Operation	Description
1 	Press the  button to turn it "On".	* Hot water supply temperature is displayed.
2  Previous set temperature (Eg.: 40°C)	Turn on hot water. 	* This is lit during combustion. < Display details > 

WARNING



Whenever using the hot water, such as when using the shower, check the temperature shown on the remote controller first, and then test the hot water temperature by hand.

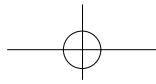
Be especially careful if using hot water after previously using water at 60°C or above to prevent scalding.

WARNING



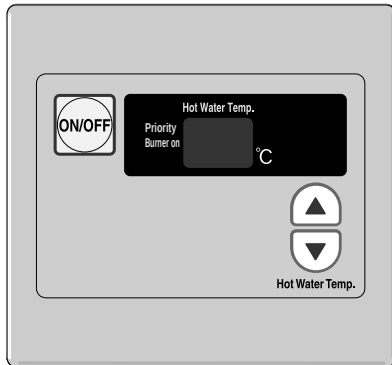
While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned "off", when using sub remote controller.

This is to prevent scalding if the temperature rises. Conversely, if the temperature reduces or the power switch is turned "off", the user may be upset when the water suddenly becomes much colder.



When using RCS3211

Setting Hot Water Temperature



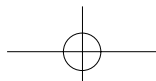
On this Display	Operation	Description
1 	Press the  button to turn it "On".	* Hot water supply temperature is displayed.
2  (Eg.: 40°C)	Use the  buttons to adjust the temperature.	

WARNING



While the shower is being used, no one other than the user should change the temperature, the power switch must not be turned "off", when using sub remote controller.

This is to prevent scalding if the temperature rises. Conversely, if the temperature reduces or the power switch is turned "off", the user may be upset when the water suddenly becomes much colder.



● Approximate hot water conditions ●

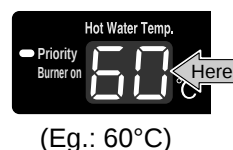
																		(°C)
37	38	39	40	41	42	43	44	45	46	47	48	50	55	60	65	70	75	80
Washing dishes, etc.		Shower, hot water supply, etc.					Hot water supply, etc.						High temperature					

- Hot water temperatures are approximations, and may differ from actual temperatures depending on external factors, such as the season and length of piping involved.
- When low temperatures are set (for washing dishes, etc.), if the ambient water temperature is already quite high, it may be difficult to ensure the resultant water temperature is as per the setting.
- When the hot water temperature is adjusted using thermostat-controlled water mixing valves, set the temperature on the remote controller to about 10°C higher than that required to ensure the appropriate temperature.

● When setting high temperatures (60 - 80°C); ●

When setting high temperatures (60 - 80°C);

- When a high temperature is set, the readout on the right is shown.
- Please check the temperature displayed before using any hot water.
Be especially careful using any hot water after any previous setting of between 60 - 80°C.

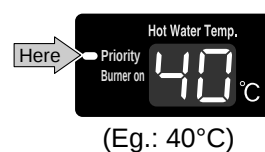


(Eg.: 60°C)

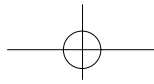
Temperature display flashes for about 10 seconds to indicate high temperature.

● Please switch to the priority setting if the temperature cannot be adjusted. ●

- If the power switch on the remote controller is turned “on”, the remote controller has priority in adjusting the temperature.
- When the temperature can be adjusted (console has priority), the display screen is shown as per right.
- If the temperature cannot be adjusted, turn the power switch to “off”, and then turn it “on” again.

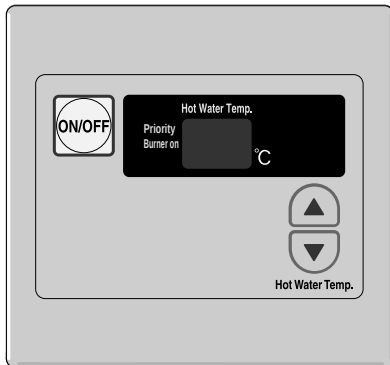


(Eg.: 40°C)



When using RCS3211

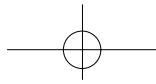
Confirmation Beeper On/Off



The remote controller will emit a sound when any button is pushed. This sound can be muted if it is desired.

* Initial factory setting is with sound.

Operation	Description
1 Press the  button for about five seconds. < Completion of setting >	* Setting is possible regardless of whether the power switch is ON/OFF.



No remote controller case

Running Hot Water

The water temperature will be set at 60°C (fixed). Please mix in some cold water through the water mixing valves.

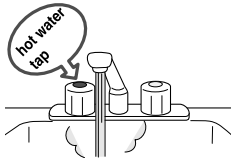
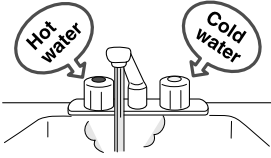


WARNING



Whenever using hot water, such as when using the shower, first test the hot water temperature by hand.

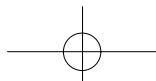
To prevent scalding.

Operation		Description
1	Turn on hot water. 	
2	Temperature adjustment for hot water supply 	
3	Turn off the hot water tap after use.	



Contact your installer if you wish to fix the temperature at 42°C, 45°C, or 75°C (such as to connect a dishwasher, etc.).

If the temperature is set at 75°C, use thermostat-controlled water mixing valves to prevent scalding when using other taps.



Preventing Damage from Freezing

The heater and piping can be damaged if cold temperatures cause water to freeze inside the unit. The damage can be prevented with the following method:

Normal cold [outside temperatures between 0°C - 10°C with no wind]

At these temperatures, the units have freeze prevention heaters that will prevent freezing.

- * **Do not disconnect the power. The freeze prevention heaters will not work if the power is disconnected.**
- * The freeze prevention will work regardless of whether the operation button on the remote controller has been turned on.

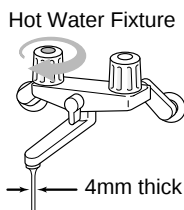
When the temperature drops, the **freeze-prevention heaters** are automatically activated to keep the unit warm and prevent it from freezing.

The freeze prevention heaters will not prevent the plumbing external to the unit from freezing. Protect this plumbing with insulation. If you are still worried that your heater will freeze, contact the nearest Bosch Service Dealer.

For severely cold temperatures [outside temperature including wind chill of less than -10°C]

Run water to prevent freezing.

1. Turn the unit on with the Power Button on the Remote Controller.
2. Close the gas supply valve.
3. Open a hot water fixture and let it run for approx. 1 minute, and then check that the number 11 is flashing on the remote controller display.
 - * If multiple units are being used, drain each unit for approx. 1 minute.
 - * It is possible that a different number may be displayed on the remote controller, but as long as it is flashing, you may continue.
4. Adjust a hot water fixture, and keep a small amount of hot water running. (0.4L/minute or about 4mm thick.)
 - * If there is a mixing valve, set it to the highest level.
 - * When linking multiple units, discharge water equivalent to 0.4L/minute per unit.
5. The flow may become unstable from time to time. Check the flow 30 minutes later.

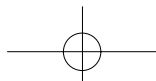


- This method can be applied not only to the heater, but also to the water supply, water piping and mixing valve.
- Remember that if the mixing valve is set to the maximum level, there is a risk of scalding.
- If freezing still might occur, drain the water from the unit following the steps on P29.

If water will not flow because it is frozen

1. Close the gas and water valves.
2. Turn off the operation button.
3. Open the water supply valve from time to time to check whether water is running.
4. When the water is flowing again, check for water leaks from the equipment and piping, or follow steps 1 through 4 on P9 ("Initial Operation").

- If the heater or the piping is frozen, do not use the heater, or it may become damaged.
- Repairs for damage caused by freezing, is not covered by the warranty.



When Unused for an Extended Period-1

If the water heater will not be used for a long period of time, drain the water.

⚠ CAUTION



Whenever the unit is checked, maintained, or drained, the power switch must be turned "Off", and it must be allowed to cool down first.

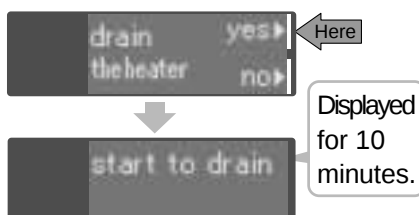
To prevent scalding.

The water within the appliance is still very hot, for a short period after use.

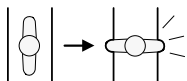
Preparation A bucket for draining water.

Drainage using the remote controller RCM3211

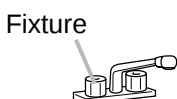
- 1 Follow the procedure on Pgs. 20 - 21, and set "Drain the heater" to "yes".



- 2 Close the water supply valve.



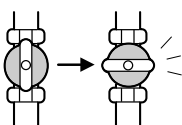
- 3 Fully open all hot water fixtures.



- 4 Open all cleanout plugs by turning them to the left.
(Position of the cleanout plugs → P30)
* Draining starts.

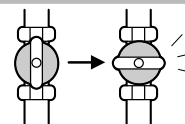
- 5 When the water is completely drained, replace all drain plugs and close the hot water fixtures.

- 6 Close the gas valve.

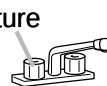


Manual draining

- 1 Close the gas valve.



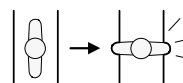
- 2 1. Turn the power switch "On".
(If there is no remote controller, make sure that the power is plugged in.)
2. Open the hot water tap fully, leave it in that position for at least one minute, and then turn off the tap.



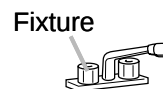
* For conjunct setting: Allow at least one minute per unit

* Error display <11> may appear on the remote controller, but this is not an error. Do not turn the power switch "Off".

- 3 Close the water supply valve.



- 4 Fully open all hot water fixtures.



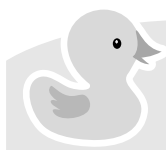
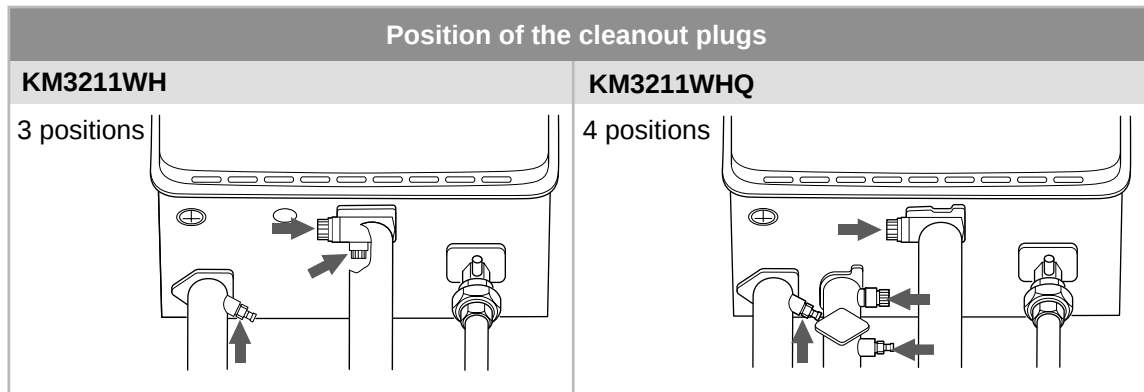
- 5 Open all cleanout plugs by turning them to the left.
(Position of the cleanout plugs → P30)
* Draining starts.

- 6 When the water is completely drained, replace all drain plugs and close the hot water fixtures.

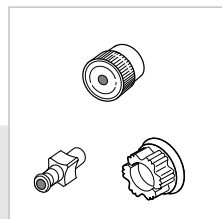
(Continued)

When Unused for an Extended Period-2

If the water heater will not be used for a long period of time, drain the water.



- * The shapes of the cleanout plugs are as pictured on the right.
- * The cleanout plugs may not be clearly visible as they are partially hidden behind the pipe insulation.
- * Water may not drain out fully even though the cleanout plugs are loosened, depending on the pipe arrangement. In this case, fully remove the cleanout plugs. (Make sure not to mislay them.)



● For re-use ●

Please start to use it again in accordance with the "Initial Operation" procedure on P9.

Regular Maintenance-1

Inspection (Once a month)

Caution



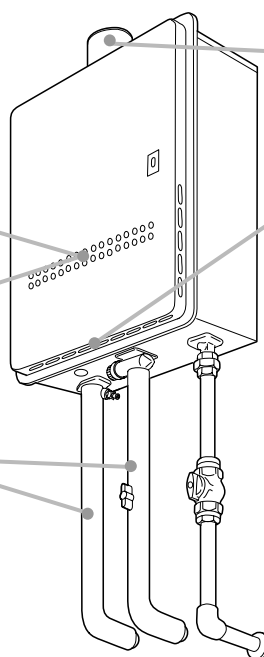
To avoid burns, wait until the equipment cools down before draining the water. The appliance will remain hot after it is turned off.

Check For laundry, newspaper, timber, oil, spray cans and other combustible materials. (P5)

Check For abnormal sounds during operation.

Check For abnormalities in external appearance, discoloration or flaws.

Check For water leaks from the equipment and piping.



Check For dust and soot in the exhaust vent or exhaust vent terminal.

Check For dust or debris in the air inlet.

(Eg.: KM3211WH)

Maintenance (Once a month)

Equipment

Wipe the outside surface with a wet cloth, then dry the surface. Use a neutral detergent to clean any stains.

Remote Controller

Wipe the surface with a wet cloth.

- Do not use petrol, oil or fatty detergents to clean the remote controller; deformation may occur.
- The remote controller is water resistant but not water proof. Keep it is dry as possible.

Regular Maintenance-2

Maintenance (Once a month)

Water Drain Valve (with Water Filter)

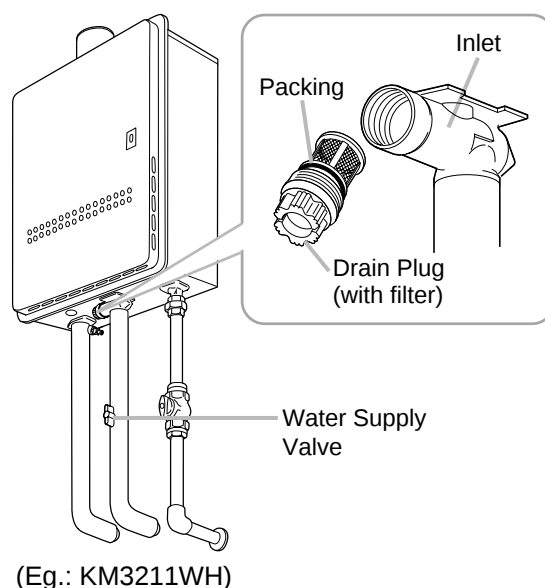
If the water drain valve (with water filter) is covered with debris, the hot water may not run smoothly, or the unit may produce cold water. Check and clean the filter as explained below.

*** To avoid burns, wait until the equipment cools down before draining the water.**

The appliance will remain hot after it is turned off.

* Water will be discharged from the trap plug. Place a container, etc. to receive the discharged water.

1. Close the water supply valve.
2. Open all hot water fixtures.
3. Remove the inlet and outlet drain plugs (about 1L will drain out)
4. Take the water drain valve (with water filter) out of the inlet. (See illustration to right).
5. Clean the water drain valve (with water filter) with a brush under running water.
6. Replace the water drain valve (with water filter). (Take care not to lose the packing.)
7. Close all hot water fixtures.
8. Open the water supply valve and check that water does not leak from the drain plugs or water drain valve (with water filter).



Troubleshooting-1

Temperature

Hot water is not available when the hot water fixture is opened.

- Are the gas and water supply valves fully open?
- Is the water supply cut off?
- Is the hot water fixture sufficiently open?
- Is the heater frozen?
- Is the gas meter working?
- (For LP) Is there enough gas in the tank?
- Is the operation button turned on?
- Have you allowed enough time for the cold water in the pipes to drain out?

Hot water is not available at low temperatures.

- Are the gas and water supply valves fully open?
- Is the water temperature setting appropriate check remote controller?
- If the supply water is at a high temperature, you may need to increase the flow rate through the heater to get a low temperature out of it.

Hot water is not available at high temperatures.

- Are the gas and water supply valves fully open?
- Is the water temperature setting appropriate, check remote controller?

Cold water comes out when the fixture is barely opened. Only cold water is available at low flow rates.

- The heater stops burning when the flow of hot water becomes less than 3 LPM. Open the hot water fixture more, and the water temperature will stabilize.

Troubleshooting-2

Amount of hot water

The pressure at a certain fixture is not constant.

- When hot water is demanded at other fixtures, the amount available may be reduced.
- Pressure fluctuations and other plumbing conditions can cause the temperature and pressure at a fixture to be unstable, but it should stabilize after a short time.
- To keep the temperature stable, the heater limits the amount of water that can flow through it to a small amount initially, but the amount increases over time.

Remote controller

The power lamp is not lit.

- Has the power been cut?

Clock shows "0:00".

- If the power is disconnected for any reason, when the power is reconnected, the clock on the display screen shows "0:00", indicating that it needs to be reset. (→P10)

After the power is cut, the hot water supply temperature is different.

- If using the remote controller RCS3211, the hot water temperature display reverts to the factory setting, so please check it.

The display on the remote controller moves continuously.

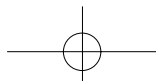
- In order to prevent the screen from burning out, after the remote controller has not been used for about 10 minutes, the screen display changes, and continuously scrolls sideways. (→P7,20-21)

The  symbol is blinking.
The combustion indicator / the burner on indicator turns on and off.

- During instant hot water operation, the combustion heater turns on and off intermittently. This is normal.

Temperature setting cannot be increased.

- Has the maximum temperature setting been changed? (→P20-21)



Sound

The fan can be heard after operation is stopped.

- The fan runs for a while to accelerate ignition after the operation button is turned on.

Other

The Heater stops burning during operation.

- Are the gas and water supply valves fully open?
- Is the water supply cut off?
- Is the hot water fixture sufficiently open?
- Is the gas meter working?
- (For LP) Is there enough gas in the tank?

White smoke comes out of the exhaust vent on a cold day.

- This is normal on cold days.

The hot water becomes turbid.

- This is harmless. Small bubbles appear as the air in the water is heated and depressurized rapidly to atmospheric pressure. It is similar to the bubbles in beer or carbonated beverages.

Water leaks from the drain plugs on the outlet.

- When the main unit is highly pressurized, water will leak from the drain plugs as a safety so that the unit is not damaged by the high pressure.
- These plugs are pressure relief valves. If water is leaking out of them, excessive pressure is being supplied to the unit: Have the water pressure checked by your installer or Bosch Service Dealer.

Troubleshooting-3

Please check the failure display on the remote controller or the combustion lamp on the main body.

In the event of a failure, the cause is notified by a blinking failure display. Please resolve the problem in accordance with the table below.



Failure display blinks

(This display is an example.)



(if using RCM3211)

(if using RCS3211)

Failure display	Details of Failure	Remedy
11 F11	Fault occurs with the ignition switch at the hot water supply side.	Turn the power "Off", make sure that the gas valve is open and that the gas meter (microcomputer meter) has not shut off the gas, and if this is the problem, please rectify it. Then, turn the power "On", and when the hot water tap is turned on, it is back to normal if nothing is displayed.
99 F99	Fault occurs with combustion of the unit.	Please contact your retailer or gas supplier.

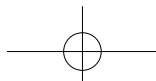
[Combustion lamp is lit. (P6)]

In the event of a failure, you are notified by the combustion lamp blinking at the front of the unit. Please resolve the problem in accordance with the table below.

Combustion lamp	Details of Failure	Remedy
Continuously blinking Lit Unlit	Fault occurs with the unit.	Make sure that the gas valve is open. Close the hot water tap, then reopen it, and it is back to normal if the combustion lamp is no longer lit.

Contact a Bosch service dealer if:

- Any other error code appears.
- An error code is indicated again after the above actions were followed.
- There are any other questions.



Follow-up Service

Requesting Service

First follow the instructions in the troubleshooting section (P33 to P36).
If the error is not corrected, contact your Bosch Service Dealer.

We will need to know:

The Model (check the rating plate)

*See P4 for the location of the label

Date of purchase (see the warranty)

Details of problem ... (flashing error codes,
etc., in as much detail as possible)

Your name, address, and telephone number



* A request for service may be rejected if the water heater is installed
in a location where working on the unit may be dangerous. Contact a
plumber.

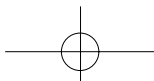
Warranty

Be sure that the shop name, date of purchase and other necessary items are filled in.
Read the content carefully, and keep in a safe place.

For repairs after the warranty period, there will be a charge on any service, and service will only
be performed if the unit is deemed repairable.
See Warranty Document on page 78.

Minimum period of time for stocking repair parts

Bosch will stock repair parts for this unit for a minimum of ten years after production has ceased.
These are the parts necessary to repair or maintain this unit.



Specifications

- Specifications may be changed without prior notice.
- The capacity may differ slightly, depending on the water pressure, water supply, piping conditions, and water temperature.

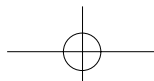
Specifications

Item		Specification	
Model Name		KM3211WH	KM3211WHQ
Type	Installation Air Supply/Exhaust	Indoor or Outdoor, Wall Hanging Power Vented	
Ignition		Direct Ignition	
Minimum Pressure for Maximum flow		200 kPa	
Minimum Flow Rate		3.5 L/min.	
Dimensions		61.5 cm(Height) x 46.4 cm(Width) x 24 cm(Depth)	
Weight		29 kg	32 kg
Water Holding Capacity		1.1 Litre	
Connection Sizes	Water Inlet	3/4"	
	Hot Water Outlet	3/4"	
	Hot Water Return	—	1/2"
	Gas Inlet	3/4"	
Power Supply	Supply	240 VAC (50Hz)	
	Consumption	NG:100W LP:115W Freeze Prevention 115W	NG:135W LP:150W Freeze Prevention 140W
Materials	Casing	Zincified Steel Plate/Polyester Coating	
	Flue Collar	Stainless Steel	
	Heat Exchanger	Copper Sheetting, Copper Tubing	
Safety Devices		Flame Rod, Thermal Fuse, Pressure Relief Valve, Lightning Protection Device (ZNR), Electric Leakage Prevention Device, Overheat Prevention Device, Freezing Prevention Device, Fan Rotation Detector	
Accessories		Remote Controller, Anchoring Screws	

Performance

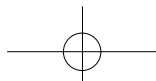
Item		Maximum Performance	Minimum Performance
Gas Consumption	NG	250 MJ/h	20 MJ/h
	LP	250 MJ/h	18 MJ/h
Hot Water Capacity	25°C Rise	32 L/min.	
	58°C Rise	13 L/min.	
Capacity Range		3 - 32 L/min.	
Temperature Settings		37 - 48, 50, 55, 60, 65, 70, 75, 80°C (Bridge 83°C)	
Default Temperature Options		40, 50, 60, 83°C	



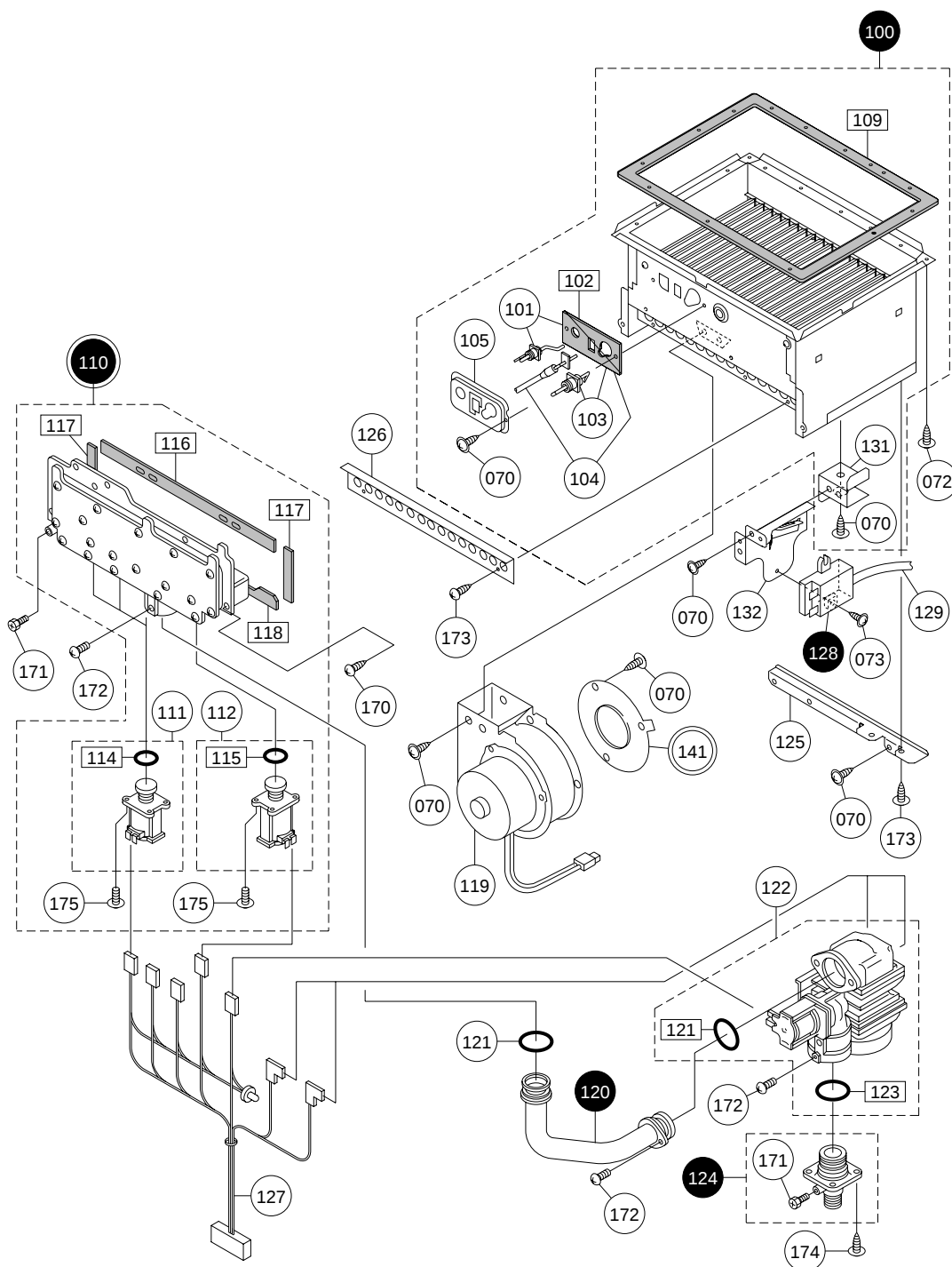


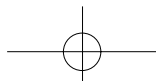
External outfitting KM3211WH . KM3211WHQ

Part Nos.	Part Names	Order Nos.	Q'ty / unit	Note
001	KM3211WH BOS Front set-AS	SKA7035	1	For KM3211WH
	KM3211WHQ BOS Front set-AS	SKA7036	1	For KM3211WHQ
002	Front packing S AAP	AAPL015	2	
003	Front packing L AAP	AAPL017	2	
004	Lamp seal plate DEC	DECK008	1	
006	Case top packing EDM	EDML001	1	
007	Case top cover 2 EDL	EDLA005	1	
008	Case top cover EDM	EDMA003	1	
009	Exhaust syylinder packing EDL	EDLL002	1	
010	Exhaust box EDM	EDMF001	1	009, 012 also replace
012	Exhaust joint packing DHN	DHNL003	1	
016	Pump fixing plate DHN	DHNA007	1	For KM3211WHQ
022	Caution label BOSCH EJX	EJXK004	1	
023	Plug insulation sheet CRU	CRUK002	1	
025	Case H EJX	EJXA011	1	For KM3211WH 022 also replace
	Case QH EJX	EJXA001	1	For KM3211WHQ 022 also replace
026	Air thermistor 300 BWC	BWCH003	1	For KM3211WHQ
027	Cord Bush C1	7355009	1	
038	Shield plate EAD	EADA011	1	For KM3211WHQ
039	Connection diagram label BOSCH EJX	EJXK007	1	
040	Raintight seal plate BUB	BUBK004	1	
050	Connection Cord 2 DMB	DMBJ010	1	
070	Cross recessed round-head collar N-tapping screw 4X8			SUS410
071	Cross recessed truss type3 EVERTIGHT tapping screw with PW 4X12			SUS410 dacrotized
072	Cross recessed round-head collar N-tapping screw 4X10			SUS410
073	Cross recessed round-head collar N-tapping screw 4X12			SUS410
074	Cross recessed truss type3 S TIGHT tapping screw4X10			SUS410 pre-coating



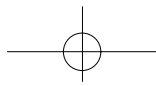
Combution unit and gas route KM3211WH . KM3211WHQ



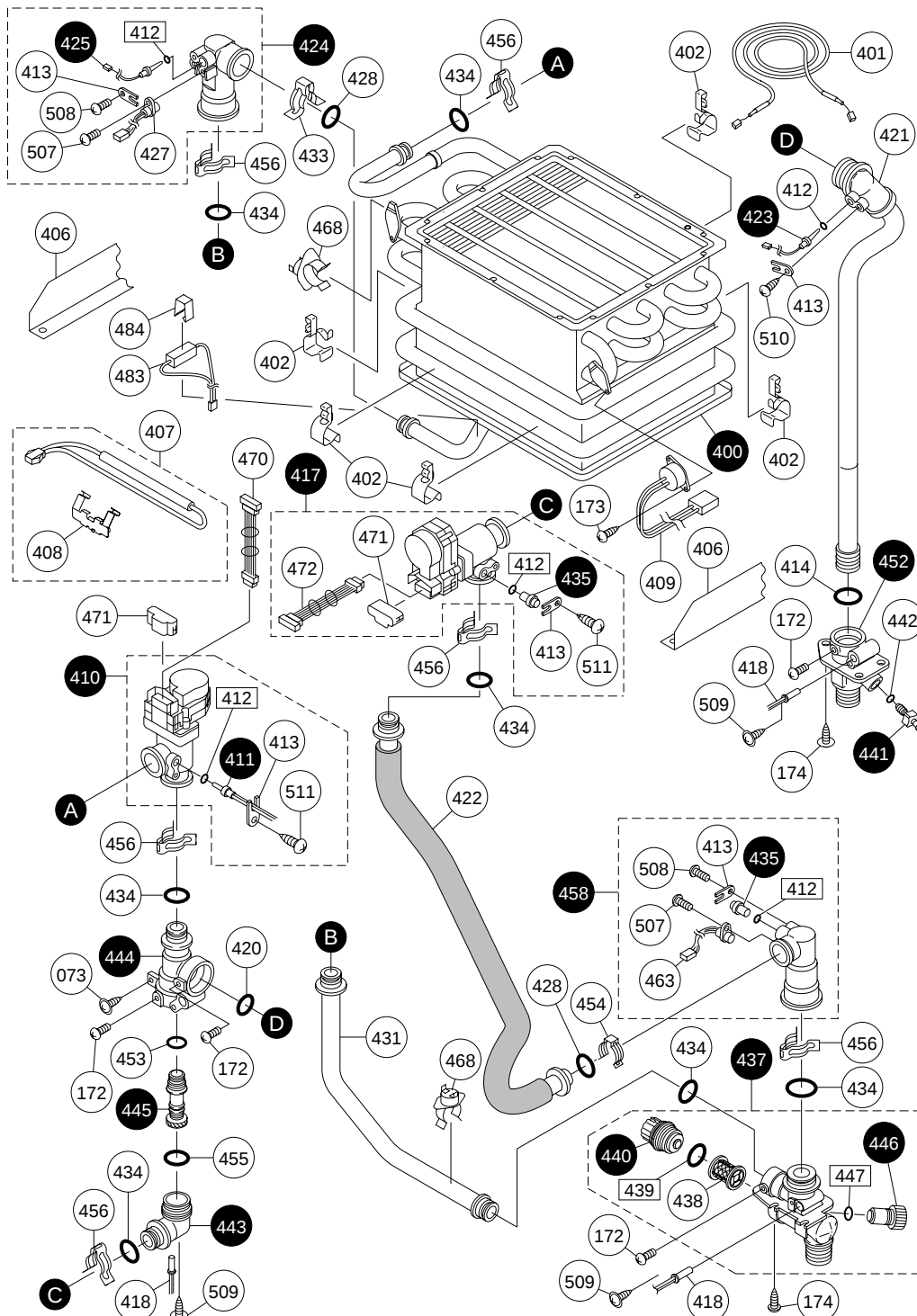


Combustion unit and gas route KM3211WH . KM3211WHQ

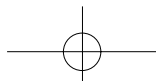
Part Nos.	Part Names	Order Nos.	Q'ty / unit	Note
100	Combustion tube set EAC SET-V	SBP7302	1	116, 117, 118 also replace
101	Flame rod DLK SET-V	SBA7506	1	
102	Plug packing(for N) DLK	DLKL012	1	
103	Ignition plug Q(N) SET-V	SBA7504	1	
104	Burner sensor DLK SET-V	SBA7505	1	
105	Plug fixing plate(for N) DLK	DLKC009	1	
109	Suction air joint packing DHN	DHNL002	1	
110	Manifold set 15 DHN SET-AS	SAR7812	1	For LPG 121 also replace
	Manifold set 24 DHN SET-AS	SAR7574	1	For NG 121 also replace
111	Solenoid S16L CRU SET-AS	SAQ7346	3	
112	Solenoid S24L CRU SET-AS	SAQ7406	1	
114	O-ring S30 type 1A	SAD6433	3	
115	O-ring S-38	SAD6372	1	
116	Manifold seal packing top CRP	CRPL002	1	
117	Manifold seal packing side CRP	CRPL004	2	
118	Manifold seal packing bottom CRP	CRPL003	1	
119	Fan moter Q CXB	CXBF030	1	
120	Manifold pipe DHN	DHNE015	1	121 also replace
121	O-ring P25.5	SAB1512	2	
122	Gas mech. S24DQ CRP SET-V	SAQ7708	1	
123	O-ring JASO 2028A	8590109	1	
124	Gas fitting 20ASET CRU	CRUE016	1	123 also replace
125	Mounting plate for burner case DLT	DLTC001	1	
126	Main damper 11 CRP	CRPC052	1	
127	Conduit R10 DEK	DEKJ014	1	
128	Igniter AGV	AGVJ007	1	129 also replace
129	High-voltage cord 470	SAC1229	1	
131	Mounting plate for igniter EAC	EACC011	1	
132	Mounting plate for igniter DTJ	DTJA015	1	
141	Bell-mouse φ44 CRU	CRUC045	1	For LPG
	Bell-mouse φ48 CRU	CRUC046	1	For NG
170	Cross recessed round-head type3 EVERTIGHT tapping screw 5 × 16			SUS410
171	Cross recessed hexagon head machine screw M4X8			SWRM chromate, pre-coating
172	Cross recessed round-head machine screw M4 × 8			SUS430 black
173	Cross recessed round-head N-tapping screw 4X8			SUS410
174	Cross recessed round-head collar type3 EVERTIGHT tapping screw 4X12			SUS410
175	Cross recessed round-head SPAKmachine screw with guide M4X12			SUS22 chromate



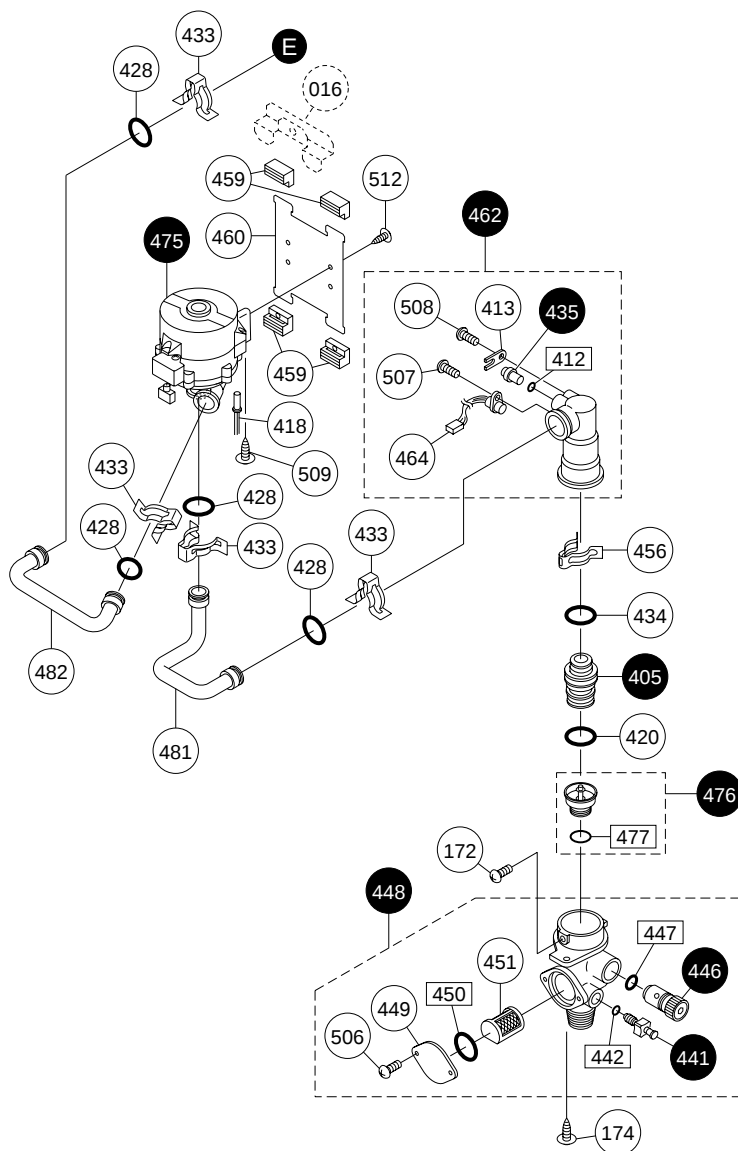
Hot-water feed route1 KM3211WH



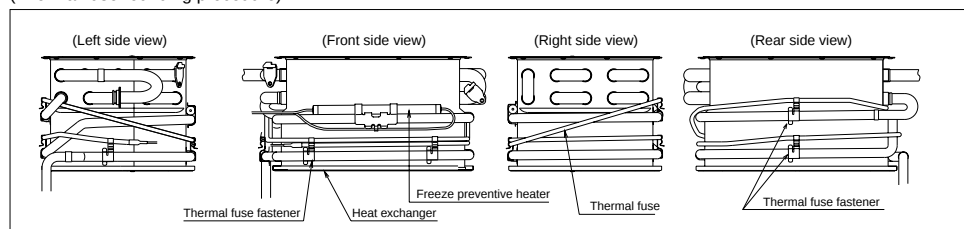


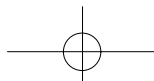


Hot-water feed route3 KM3211WH . KM3211WHQ



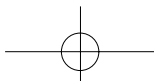
(Thermal fuse rounding procedure)





Hot-water feed route KM3211WH . KM3211WHQ

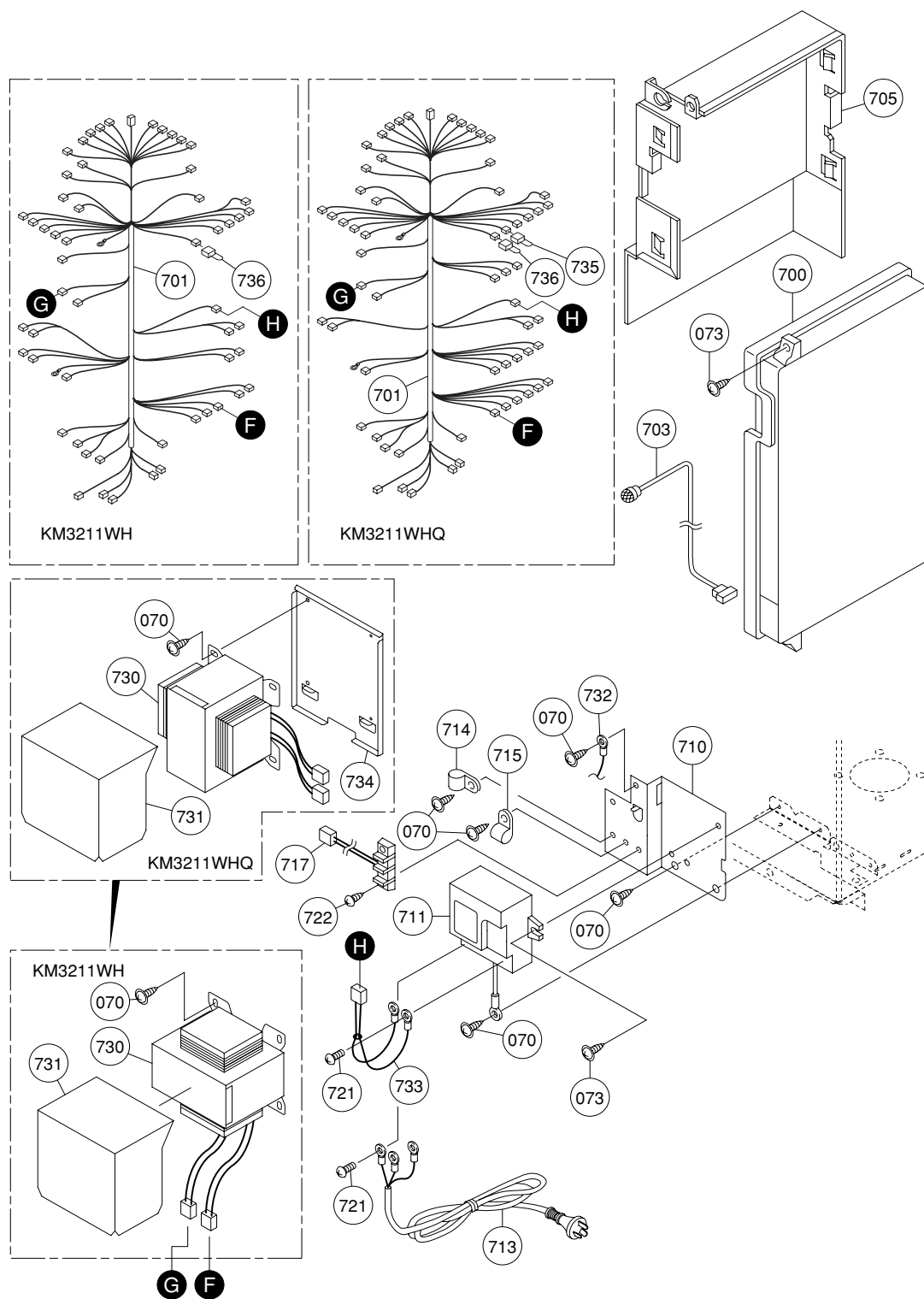
Part Nos.	Part Names	Order Nos.	Q'ty / unit	Note
400	Heat exchanger EAC SET-AS	SBN7205	1	012, 109, 401, 402, 428, 434 also replace
401	Thermal fuse DHN SET-V	SBA7398	1	
402	Thermal fuse fastener CXD	CXDH003	5	
405	Water inlet coupling DJP	DJPD012	2	For KM3211WHQ 420, 434 also replace
406	Thermal fuse cover DHN	DHNA014	2	
407	Freeze preventive heater Q DJW SET-V	SKA7037	1	
408	Heater fastener EHK	EHKH001	1	
409	Remaining flame safety device 120 DJP	DJPH002	1	
410	Water flow servo set 2 DZT	DZTD011	1	434 also replace
411	Heat exchanger thermistor-300 BWC	BWCD098	1	412 also replace
412	O-ring P4C	1323709	5	For KM3211WH
	O-ring P4C	1323709	6	For KM3211WHQ
413	Thermistor holding plate ALS	ALSD088	5	For KM3211WH
	Thermistor holding plate ALS	ALSD088	6	For KM3211WHQ
414	O-ring P20C	3059502	1	
417	Water flow servo set 1 DZT	DZTD010	1	434 also replace
418	Freeze preventive heater 3 DJW	DJWH003	3	For KM3211WH
	Freeze preventive heater 3 DJW	DJWH003	4	For KM3211WHQ
420	O-ring P22C	7573308	1	For KM3211WH
	O-ring P22C	7573308	3	For KM3211WHQ
421	Hot-water feed pipe DHN	DHND010	1	
422	Bypass pipe EAC	EACD003	1	
423	Hot-water thermistor-300 BWC	BWCD096	1	412 also replace
424	Water flow sensor set 3 DUV	DUVD019	1	428, 434 also replace
425	Water inlet thermistor-300 BWC	BWCD097	1	412 also replace
427	Water outlet magnetic sensor BWC	BWCD090	1	
428	O-ring P12.5C	3359808	2	For KM3211WH
	O-ring P12.5C	3359808	8	For KM3211WHQ
429	Branching fitting SET DHN	DHND018	1	For KM3211WHQ 420, 428 also replace
431	Water inlet pipe EAC	EACD001	1	For KM3211WH
433	Quick fastener 13-22	SAD6537	1	For KM3211WH
	Quick fastener 13-22	SAD6537	6	For KM3211WHQ
434	O-ring P16C	3223302	7	
435	Shut-off cock AXG	AXGD089	2	For KM3211WH 412 also replace
	Shut-off cock AXG	AXGD089	3	For KM3211WHQ 412 also replace
437	Water inlet fitting 20ASET EAC	EACD006	1	For KM3211WH 434 also replace
	Water inlet fitting 20ASET EBA	EBAD003	1	For KM3211WHQ 428, 434 also replace
438	Water filter (SUS) EGB	EGBD032	1	For KM3211WH
	Water filter DTJ	DTJD005	1	For KM3211WHQ
439	O-ring 16DF BRQ	BRQL008	1	
440	Water filter cap DTJ	DTJD006	1	439 also replace
441	Drain cock CRU	CRUD003	1	For KM3211WH 442 also replace
	Drain cock CRU	CRUD003	2	For KM3211WHQ 442 also replace
442	Hot-water resistant O-ring P3	SAD6633	1	For KM3211WH
	Hot-water resistant O-ring P3	SAD6633	2	For KM3211WHQ
443	Mixing coupling EAC	EACD007	1	434, 455 also replace
444	Mixing body EAC	EACD013	1	420, 434, 453, 455 also replace
445	Mixing cylinder BWC	BWCD035	1	453, 455 also replace
446	QMF safety valve A(S)	SAA2811	1	447 also replace
447	Hot-water resistant O-ring P9	SAD6635	1	
448	Return fitting 15A SET EAD	EADD010	1	For KM3211WHQ 420, 477 also replace
449	Water inlet fitting cover CRU	CRUD005	1	For KM3211WHQ
450	O-ring JASO 2023 type1 A	SAA6433	1	For KM3211WHQ
451	Water filter SUS DMM	DMMD002	1	For KM3211WHQ
452	Hot-water outlet fitting HGH	HGHD101	1	414, 442 also replace
453	O-ring P11C	1326503	1	
454	Quick fastener 12.7	6340202	1	
455	O-ring JASO 2026 type4 C	SAA6483	1	
456	Quick fastener 16A	6340300	6	For KM3211WH
	Quick fastener 16A	6340300	7	For KM3211WHQ
458	Water flow sensor SET1 DUV	DUVD017	1	428, 434 also replace
459	Pump vibration proof rubber ALS	ALSD058	4	For KM3211WHQ
460	Pump foot DAN	DANA012	1	For KM3211WHQ



Hot-water feed route KM3211WH . KM3211WHQ

Part Nos.	Part Names	Order Nos.	Q'ty / unit	Note
462	Water flow sensor SET1 DUV	DUVD018	1	For KM3211WHQ 428, 434 also replace
463	Magnetic sensor BWC	BWCD093	1	
464	Magnetic sensor for circulation BWC	BWCD092	1	For KM3211WHQ
468	Freeze Protection Thermostat BVU	BVUH002	2	
470	Conduit 86 DZT	DZTJ008	1	
471	Waterproof cover CZL	CZLD041	2	
472	Servo motor cable conduit (86) DZT	DZTJ009	1	
475	Pump HK DHN	DHND026	1	For KM3211WHQ 428 also replace
476	Shut-off valve SET DSC	DSCD028	1	For KM3211WHQ 420 also replace
477	O-ring P14C	1326708	1	For KM3211WHQ
480	Water inlet pipe EAD	EADD001	1	For KM3211WHQ
481	Return pipe EAD	EADD006	1	For KM3211WHQ
482	Pump comes out of pipe EAD	EADD008	1	For KM3211WHQ
483	Dummy heater 240V DJW	DJWH004	1	For KM3211WH
	Dummy heater 240V DJW	DJWH004	2	For KM3211WHQ
484	Heater fastener M AJB	AJBL002	1	For KM3211WH
	Heater fastener M AJB	AJBL002	4	For KM3211WHQ
485	Freeze preventive heater2 DJW	DJWH002	2	For KM3211WHQ
506	Cross recessed round-head machine screw M4X8			For KM3211WHQ SUS430
507	Cross recessed truss P TIGHT screw 4X10			SUS305
508	Cross recessed round-head P TIGHT screw 4X14			SUS305
509	Cross & straight recessed round-head collar type3 S TIGHT tapping screw 4X8			SUS410
510	Cross & straight recessed type3 S TIGHT tapping screw 4X8			SUS410
511	Cross recessed round-head P TIGHT screw 4X14			SUS410
512	Cross recessed round-head type3 EVERTIGHT tapping screw 4X8			For KM3211WHQ SWRM chromate

Electric controller KM3211WH . KM3211WHQ



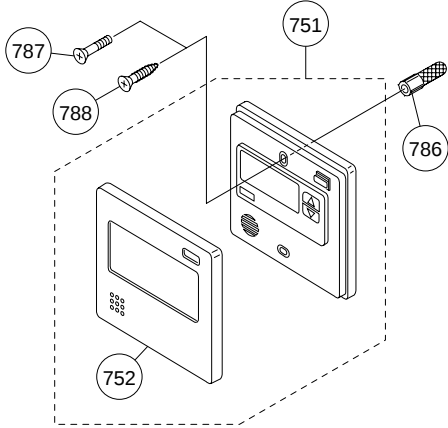
Electric controller KM3211WH . KM3211WHQ

Part Nos.	Part Names	Order Nos.	Q'ty / unit	Note
700	Relay case EJX SET-AS	SHA7706	1	
701	Harness H BOSCH EJX	EJXJ031	1	For KM3211WH
	Harness QH BOSCH EJX	EJXJ011	1	For KM3211WHQ
703	Lamp cable conduit CRP	CRPJ014	1	
705	Relay case cover DEK	DEKA014	1	
710	Mounting plate for terminal block DZT	DZTA006	1	
711	Short circuit safety device 240 EJS	EJSJ022	1	
713	Power cord EJX	EJXJ017	1	
714	Nylon clamp HP-4N (NK-4N)	7287909	1	
715	Nylon clamp HP-5N (NK-5N)	7224001	1	
717	Conduit 90-2 CCP	CCPJ028	1	
721	Cross recessed blind machine screw M3.5X6			SUS430
722	Cross recessed round-head N-tapping screw 4X12			SUS410
730	Transformer EJX	EJXJ021	1	
731	Transformer cover EJS	EJSA021	1	
732	Connection Cord 1 DEM	DEMJO09	1	
733	Conduit R92-250 EJS	EJSJ016	1	
734	Mounting plate for Transformer for Q EJS	EJSA016	1	For KM3211WHQ
735	System select connector EJS	EJSJ015	1	For KM3211WHQ
736	Heating level change connector for 83 DTJ	DTJJ031	1	

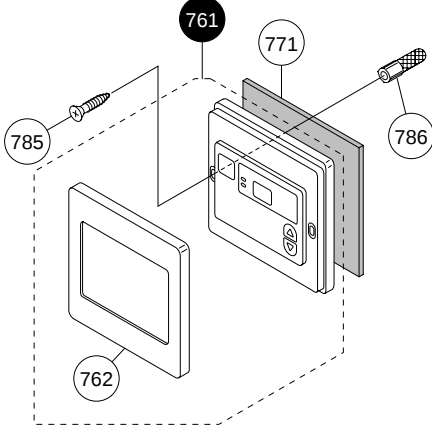
Remote controller and attached set KM3211WH . KM3211WHQ

Remote controller

Kitchen remote controller
RCM 3211



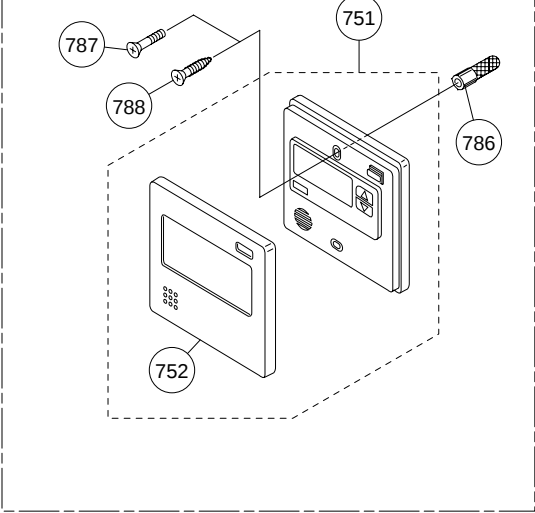
Additional remote controller
RCS 3211



Attached set

KM3211WHQ

Kitchen remote controller
RCM 3211



<Special part>

Special part	Special part no.
instruction manual	888



Installation Guide

Robert Bosch (Australia) Pty. Ltd.

GAS WATER HEATER

KM3211WH (Indoor or Outdoor Installation)

KM3211WHQ (Indoor or Outdoor Installation / Internal pump unit)

WARNING: If the information in this manual is not followed exactly, a fire or explosion may result causing property damage, personal injury or death.

Potential dangers from accidents during installation and use are divided into the following three categories. Closely observe these warnings, they are critical to your safety.

 Danger	Danger of serious injury or even death as well as the danger of fire when the product is misused by ignoring this symbol.
 Warning	Possibility of serious injury or even death as well as the possibility of fire when the product is misused by ignoring this symbol.
 Caution	Possibility of bodily injury or damage to property when the product is misused by ignoring this symbol.



Prohibited



Disconnect
Power



Ground

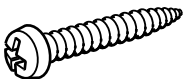


Be sure to do

10 Basic Steps for Installation

1. Check cold water supply pressures, min. & max. as per page 62
2. Check gas pipe sizing as per AG5601
3. Determine most suitable location for appliance
4. Check Relevant Gas, Water & Electrical Regulations
5. Fix hot water appliance to wall surface as per page 57
6. Locate & connect cold and hot water piping to unit as per page 62
7. Check gas inlet and burner pressures & adjust as per page 61
8. Check operation of appliance and adjust as per page 66
9. Familiarise yourself with the appliance's operation, and advise customer of its operation
10. Supply customer with these operating instructions and any other relevant paperwork

1. Installation Examples

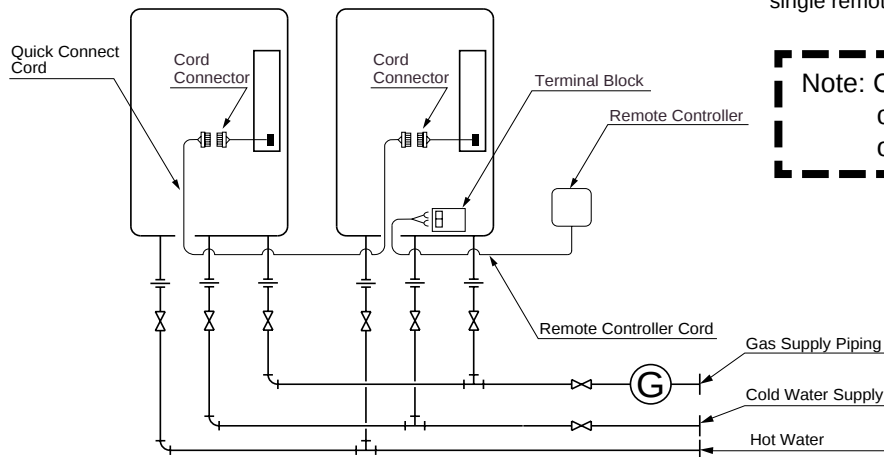
Part	Shape	Q'ty	Part	Shape	Q'ty
Fixing Screw Ø 5X35		5	Guide		1
Note 1) Remote control unit for kitchen		1 set	Note 1) Supplied with WHQ model only.		

2. Quick Connect Multi System Installation

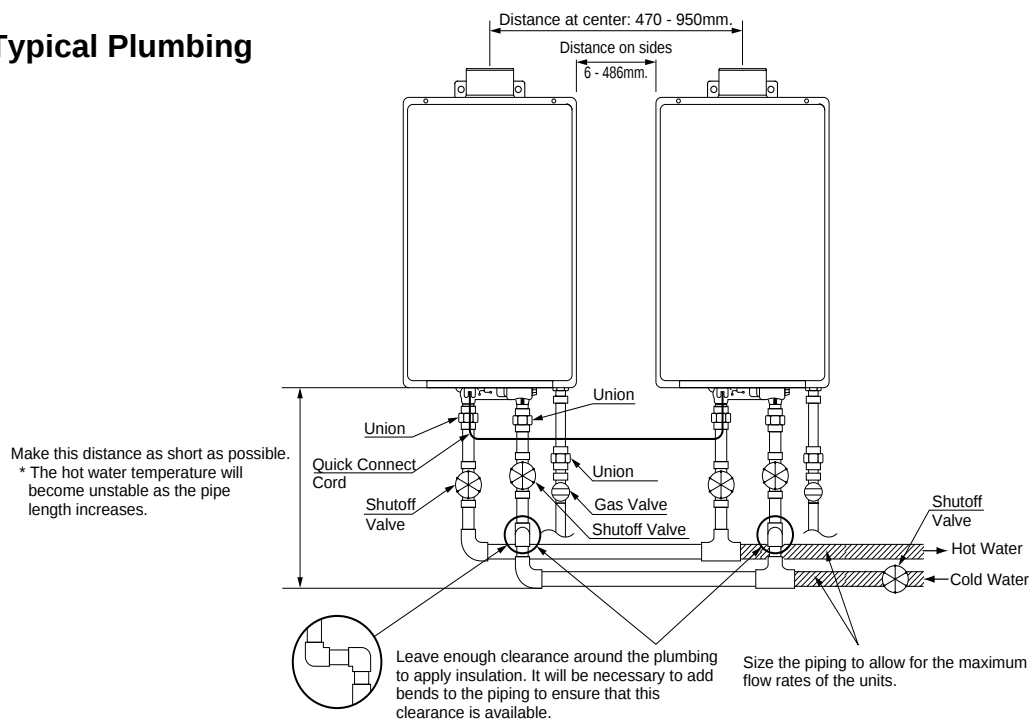
- The Quick Connect Multi System allows the installation of two units together utilizing only the Quick Connect Cord.

The Quick Connect Cord is 2m. long. Install the two units 470mm - 950mm apart at the center to ensure the cord will be able to reach between the units. (See Typical Plumbing diagram). (If the distance between the two units is too great, not only will the cord not be able to reach, but the water temperature may also become unstable because of the difference in pipe length between the two units.)

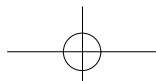
System Diagram



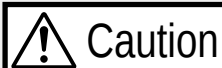
Typical Plumbing



- Insulate the hot water piping to prevent heat loss. Insulate and apply heating materials to the cold water supply piping to prevent heat loss and freezing of pipes when exposed to excessively cold temperatures.



3. Before Installation



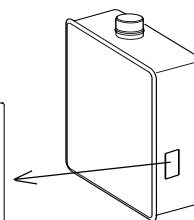
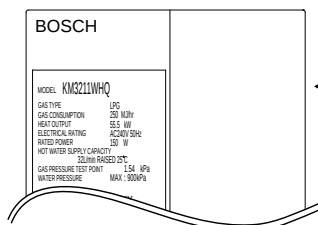
Caution

Check the Gas

- Check that the rating plate indicates the correct type of gas.
Check that the gas supply line is sized for 250 MJ/h for this unit.

Check the Power

- The power supply required is 240V AC, at 50Hz. Using the incorrect voltage may result in fire or electric shock.



Do Not Use Equipment for Purposes Other Than Those Specified

- Do not use for purposes other than increasing the temperature of the water supply.

Do not use in areas of poor water quality

Use Extreme Caution if Using With A Solar Pre-Heater

- Using this unit with a solar pre-heater can lead to unpredictable output temperatures and possibly scalding. If absolutely necessary, use mixing valves to ensure output temperatures do not get to scalding levels. Do not use a solar pre-heater with the quick-connect multi-system.

Replacement

- * Check the fixing brackets and exhaust vent yearly to make sure they do not need to be replaced. Do not install unit in a bathroom or other occupied room, installation in an improper location may cause failures or fire.

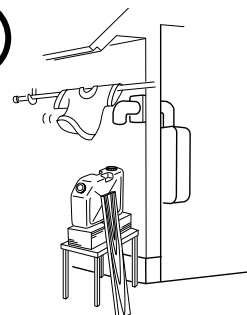
4. Choosing Installation Site

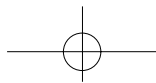
- * Locate the appliance in an area where leakage from the unit or connections will not result in damage to the area adjacent to the appliance or to the lower floors of the structure. When such locations cannot be avoided, it is recommended that a suitable drain pan, adequately drained, be installed under the appliance. The pan must not restrict combustion air flow.



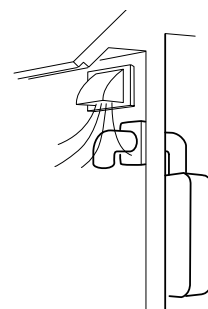
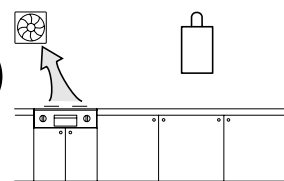
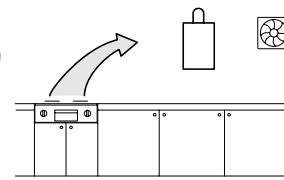
Caution

- Install the water heater in a location where it is free from obstacles and stagnant air.
- Consult with the customer concerning the location of installation.
- Do not install the water heater near staircases or emergency exits.
- Avoid places where fires are common, such as those where petrol and adhesives are handled, or places in which corrosive gases (ammonia, chlorine, sulfur, ethylene compounds, acids) are present.
This may cause incomplete combustion or failures.





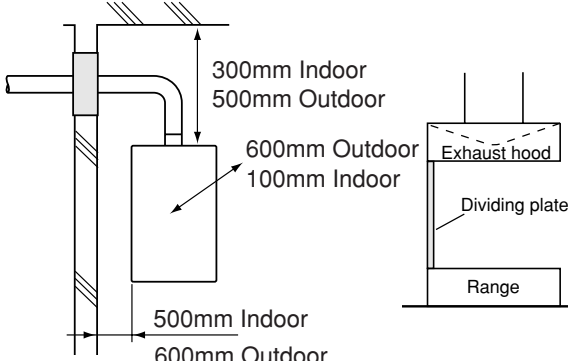
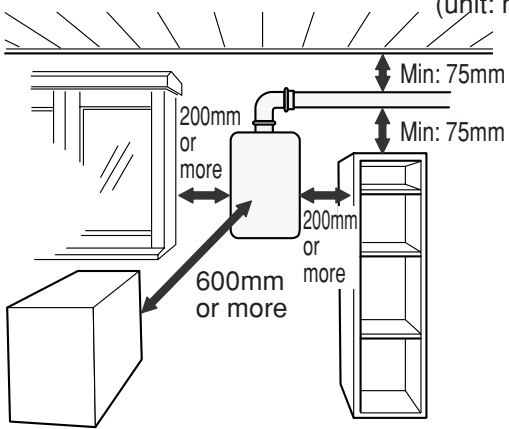
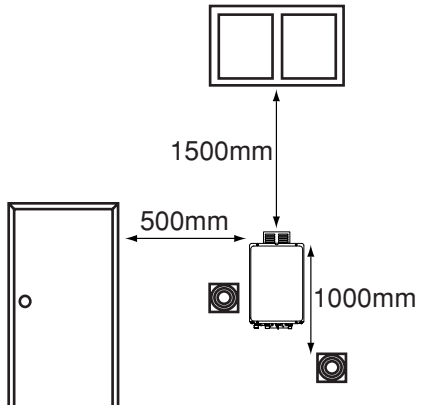
- Install the exhaust vent so that there are no obstacles around the termination and so that exhaust can't accumulate. Do not enclose the termination with corrugated metal or other materials.
- Do not install the water heater where the exhaust will blow on outer walls or material not resistant to heat. Also consider the surrounding trees and animals.
The heat and moisture from the water heater may cause discoloration of walls and resinous materials, or corrosion of aluminum materials.
- Do not locate the vent termination towards a window or any other structure which has glass or wired glass facing the termination.
- Avoid installation above gas ranges or stoves.
- Avoid installation between the kitchen fan and stove. If oily fumes or a large amount of steam are present in the installation location, take measures to prevent the fumes and steam from entering into the equipment.
- Avoid installation in places where dust or debris will accumulate.
Dust may block the air-supply opening, causing the performance of the device fan to drop and incomplete combustion to occur as a result.
- Install in a location where the exhaust gas flow will not be affected by fans or range hoods. See AS5601.
- Take care that noise and exhaust gas will not affect neighbors.
- Make sure that the location allows installation of the exhaust vent as specified.
- Avoid installation in places where special chemical agents (e.g., hair spray or spray detergent) are used.
Ignition failures and malfunction may occur as a result.
- For outdoor installation, use the outdoor vent cap. If it is necessary to vent above the roof line in an outdoor installation, also use the base of the vent cap for rain protection.
- Avoid installations where the unit will be exposed to excessive winds.
- Before installing, make sure that the vent termination (or the vent cap in an outdoor installation) will have the proper clearances according to the AS5601.



5. Installation Clearances Caution

Before installing, check for the following:

Install in accordance with relevant building and mechanical codes, as well as any local, state or national regulations.

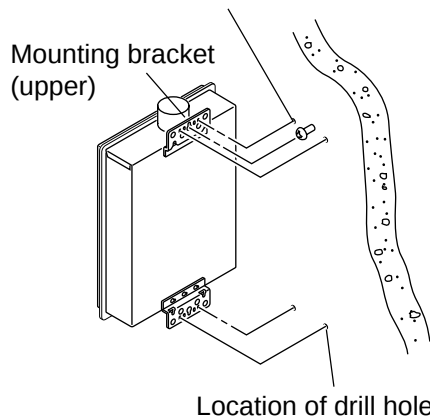
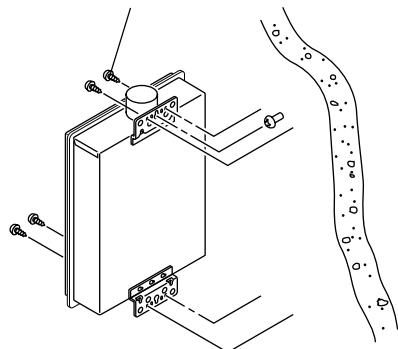
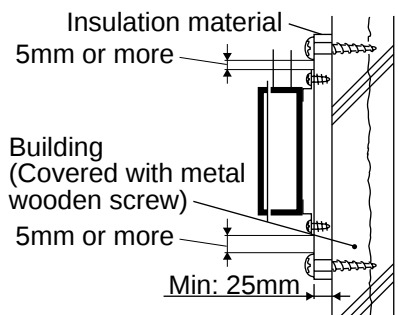
Item	Check	Illustration
Distance from combustibles	- Maintain the following clearances from both combustible and non-combustible materials. - If the unit will be installed in the vicinity of a permanent kitchen range or stove that has the possibility of generating steam that contains fats or oils, use a dividing plate or other measure to ensure that the unit is not exposed to air containing such impurities. * The dividing plate should be incombustible and the width must exceed that of the device. * Do not remove mounting brackets to reduce air gap at rear. In Accordance To AS5601	(unit: mm) 
Securing of space for repair/inspection	- If possible, leave 200mm or more on either side of the unit to facilitate inspection. - If possible, leave 600mm or more in front of the unit to facilitate maintenance and service if necessary.	(unit: mm) 
Outdoor Clearances to any Opening into Any Building	Maintain the following clearances to any opening in any building: 1.5m below and 0.5m horizontally from any door, window or gravity air inlet. 1m above any forced air inlet. 500mm below an overhang.	(unit: mm) 

6. Installation

Securing to the wall

Installation must conform with all local Building, Water or Gas Regulations or using AS5601. A heavy load will be applied to the wall on which the water heater is mounted. If the strength of the wall is not sufficient, reinforcement will be necessary.

- Mount water heater in a vertical position with flue facing upwards
- Be sure to mount the water heater on an upright wall.

Item	Check	Illustration
Location of drill hole	 Caution • When installing with bare hands, take caution to not inflict injury. • Be careful not to hit electrical wiring, gas, or water piping while drilling holes. 1. Determine position of the unit. 2. Place unit on wall and mark position of fixings.	Location of drill hole  Mounting bracket (upper) Location of drill hole
Mounting	3. Remove unit and drill holes for fixings. 4. Mount unit and tighten fixings. (Note: fixings should be sufficient to support the weight of the unit). • Make sure the unit is installed securely so that it will not fall or move due to vibrations.	Fixing Screw 
Water heater and building structure	• Ensure water heater is firmly fixed to the structure.	Insulation material 5mm or more Building (Covered with metal wooden screw) 5mm or more Min: 25mm 

7. Vent Pipe Installation (Indoor Installation Only)

Vent Piping

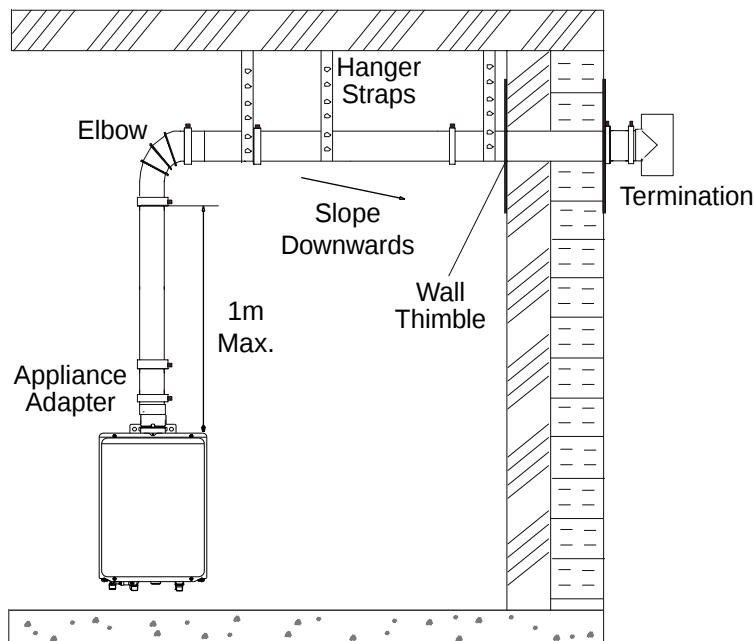
- Use only approved vent materials.
- Follow the vent pipe manufacturer's installation instructions.

Pipe diameter	100mm
No. of Elbows	Max. Straight Vent Length
3	5m
2	9m
1	13m

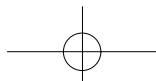
- Make the vertical section of the exhaust vent as short as possible.
- Maintain the same vent pipe diameter all the way to the end.

- Make sure vent pipe is gas tight and will not leak. Use silicon sealant wherever necessary.
- Do not place any dangerous objects at the end of the exhaust vent.
- Steam (smoke) or water drops may come out from the end of the exhaust pipe. Select the location for the end of the vent so that steam is not visible, and the vent is not wet with dripping water.
- If snow is expected to accumulate, take care that the end of the pipe is not covered with snow or hit by falling lumps of snow.
- Use a maximum of 1m of straight vertical pipe before the first elbow.
- Use a minimum total of 1m of straight vent pipe.
- Consult the vent pipe manufacturer's installation instructions for chimney connections.
- Do not common vent or connect more than one appliance to this venting system.

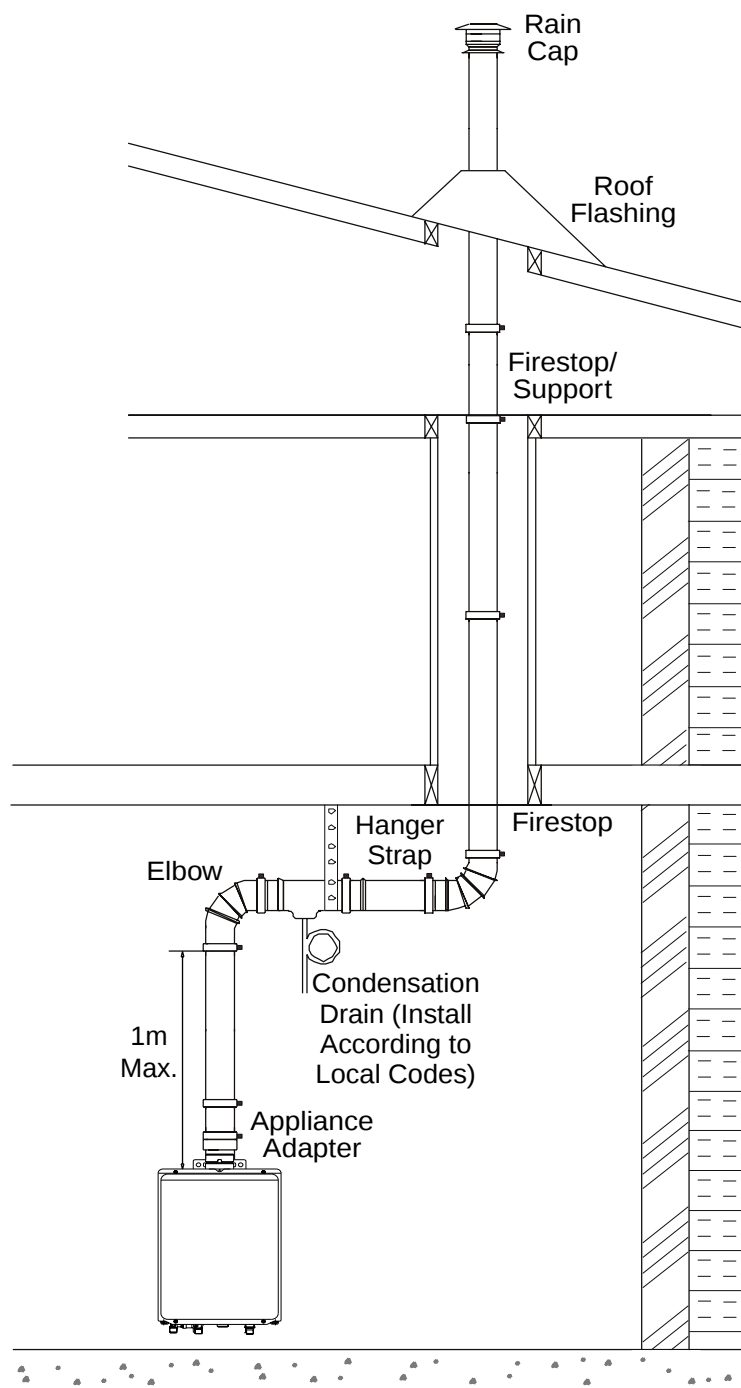
Horizontal Vent Termination



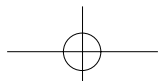
- Terminate at least 350mm above ground.
- Terminate at least 2.3m above a public walkway, 2m from the combustion air intake of any appliance, and 1m from any other building opening, gas utility meter, service regulator etc.
- Terminate at least 1m above any forced air inlet, 1.5m below, 1.5m horizontally from and 300mm above any door, window, or gravity air inlet into any building as per AS5601.
- Slope the horizontal vent 6mm downwards for every 300mm.
- Use a condensation drain if necessary.



Vertical Vent Termination



- Terminate at least 1.8m from the combustion air intake of any appliance, and 1m from any other building opening, gas utility meter, service regulator etc.
- Enclose exterior vent systems below the roof line to limit condensation and protect against mechanical failure.
- When the vent penetrates a floor or ceiling and is not running in a fire rated shaft, a firestop and support is required.
- Terminate the vent system at least 1m above, but not more than 2m above the roof line, or according to the vent pipe manufacturer's instructions.
- Provide vertical support every 3.6m or as required by the vent pipe manufacturer's instructions.
- Slope the horizontal vent 6mm downwards for every 300mm.
- Do not vent straight upwards. Always have a horizontal section of venting.
- Install a condensation drain in the horizontal section of the venting.

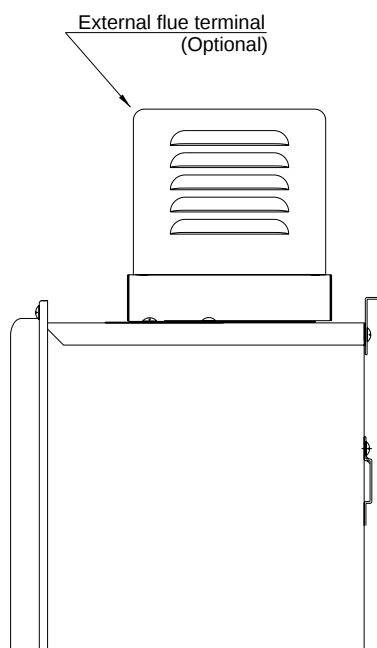
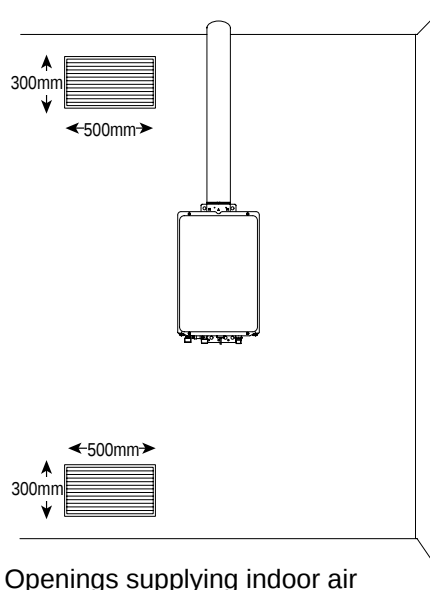


Air inlet

Observe the commercial gas equipment installation criteria and operation criteria.

- Size the air inlet according to the AS5601.
- Be sure to provide adequate air inlet.
- The air inlet needs to open to the outside air from the room in which the water heater is used.

For internal installations be sure to provide adequate ventilation for the unit to operate correctly and safely (refer to AS5601)



8. Gas Piping

Follow the instructions from the gas supplier.

The appliance must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 3.5 kPa.

The appliance and its gas connections must be leak tested before operation.

The inlet gas pressure must be within the range specified. This is for the purposes of input adjustment.

In order to choose the proper size for the gas line, consult local codes and/or the AS5601.

Gas Pressure

Size the gas line according to total MJ/h demand of the building and length from the meter or regulator so that the following supply pressures are available even at maximum demand (Refer AS5601):

Natural Gas Pressure inlet
1.13kPa

LP Gas Pressure inlet
2.75kPa

Gas Meter

Select a gas meter capable of supplying the entire J/h demand of all gas appliances in the building.

Gas Connection

- Do not use piping with a diameter smaller than the inlet diameter of the water heater.
- Gas flex lines are not recommended unless they are rated for 260 MJ/h.
- Install a gas shutoff valve on the supply line.
- Use only approved gas piping materials.

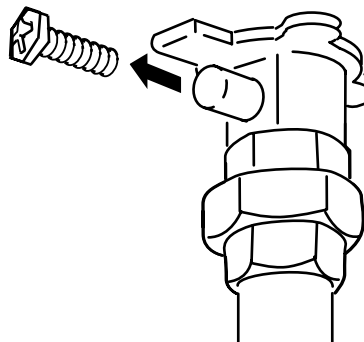
Measuring Gas Pressure

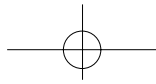
In order to check the gas supply pressure to the unit, a tap is provided on the gas inlet. Remove the hex head philips screw from the tap, and connect a manometer using a silicon tube.

Operate the unit and check pressure.

In order to check the gas manifold pressure, a pair of taps are provided on the gas valve inside the unit.

The pressure can be checked either by removing the hex head philips screw and connecting a manometer with a silicon tube, or by removing the 3mm NPT screw with an allen wrench and connecting the appropriate pressure gauge.





9. Water Piping

Ask a qualified plumber to perform the installation of the plumbing. Observe all applicable codes.

This appliance is suitable for potable water applications. Do not use this appliance if any part has been underwater. Immediately call a qualified service technician to inspect the appliance and replace any part of the control system and gas control which has been under water.

If the water heater is installed in a closed water supply system, such as one having a backflow preventer in the cold water supply line, means shall be provided to control thermal expansion. Contact the water supplier or a local plumbing inspector on how to control this situation.

This pressure relief valve must be capable of an hourly J rated temperature steam discharge of 250 MJ/h. Multiple valves may be used. The pressure relief capacity must not exceed 1029 kPa. The relief valve must be installed such that the discharge will be conducted to a suitable place for disposal when relief occurs. No reducing coupling or other restriction may be installed in the discharge line. The discharge line must be installed to allow complete drainage of both the valve and the line.

Piping and components connected to the water heater shall be suitable for use with potable water.

Toxic chemicals, such as those used for boiler treatment, shall not be introduced into the potable water.

A water heater used to supply potable water may not be connected to any heating system or components previously used with a nonpotable water heating appliance.

When water is required in one part of the system at a higher temperature than in the rest of the system, means such as a mixing valve shall be installed to temper the water to reduce the scalding hazard.

- Flush water through the pipe to clean out metal powder, sand and dirt before connecting it.
- Take appropriate heat insulation measures (e.g., wrapping with heat insulation materials, using electric heaters) according to the climate of the region to prevent the pipe from freezing.
- Use a union coupling or flexible pipe for connecting the pipes to reduce the force applied to the piping.
- Do not use piping with a diameter smaller than the coupling.
- When feed water pressure is too high, insert a depressurizing valve, or take water hammer prevention measures.
- Avoid using joints as much as possible to keep the piping simple.
- Avoid piping in which an air holdup can occur.
- Use approved piping materials.
- If installing the unit on a roof:

If the unit is installed on a roof to supply water to the levels below, make sure that the water pressure supplied to the unit does not drop below 199 kPa. It may be necessary to install a pump system to ensure that the water pressure is maintained at this level.

Check the pressure before putting the unit into operation.

Failing to supply the proper pressure to the unit may result in noisy operation, shorter lifetime of the unit, and may cause the unit to shut down frequently.

Supply water piping

- Do not use PVC piping.
- Mount a shut off valve (near the inlet).
- In order for the client to use the water heater comfortably, 200 to 900 kPa of pressure is needed from the water supply.
Be sure to check the water pressure. If the water pressure is low, the water heater cannot perform to its full capability, and may become a source of trouble for the client.

Drain piping

- Expansion water may drop from the pressure prevention device and wet the floor. If necessary, provide drain piping or use a drain hose to remove the water.

Hot water piping

- Do not use lead or PVC piping.
- The longer the piping, the greater the heat loss. Try to make the piping as short as possible.
- Use a mixing valve with a low water resistance. Use shower heads with low pressure loss.
- If necessary, use a pump or other means to ensure that the supply water pressure to the inlet of the heater does not fall below 199 kPa when the maximum amount of water is being demanded. Also install a pressure meter on the inlet. If this is not done, local boiling will occur inside the water heater causing abnormal sounds and decreasing the durability of the heat exchanger.



It is recommended that for sanitary fixtures use primarily for the purpose of personal hygiene, that a temperature control device be fitted (such as a tempering valve) as per AS3498.

Instantaneous Hot Water Piping Works [For KM3211WHQ]

These appliances cannot be linked.

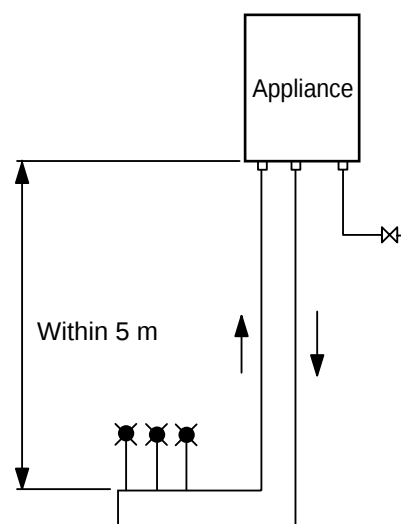
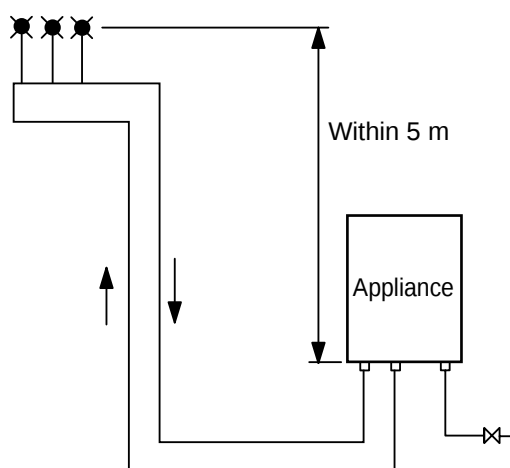
Precaution of piping works

1. Be sure to connect a return pipe to circulate the hot water. (A one-way pipe is not allowed.)
2. The circulation pipe shall not be longer than 60 m (back to base), with no more than 20 bends. (Contact the relevant waterworks department for direct connection to city water at a distance of over 30m.)
3. Piping diameter shall be as follows:

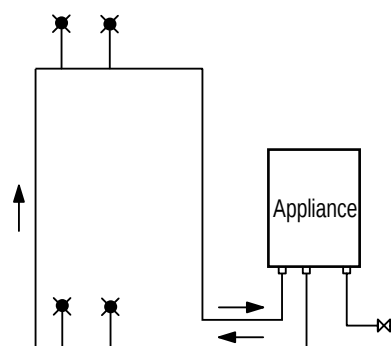
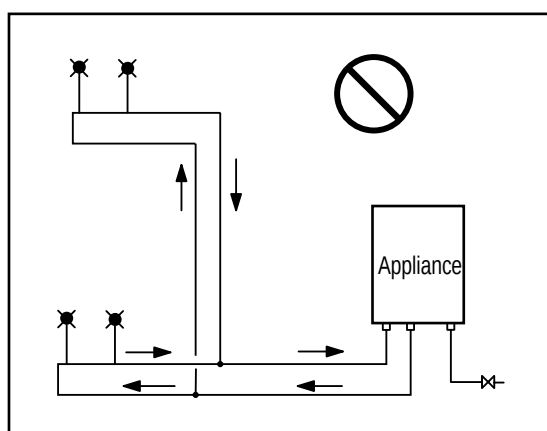
Forward	R3/4
Return	R1/2

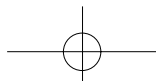
4. Limit of height differential is as follows.

* In this case, 196 kPa or more is required as the water supply pressure at the appliance inlet.



5. Since there occurs improper circulation, do not conduct two routes of piping.



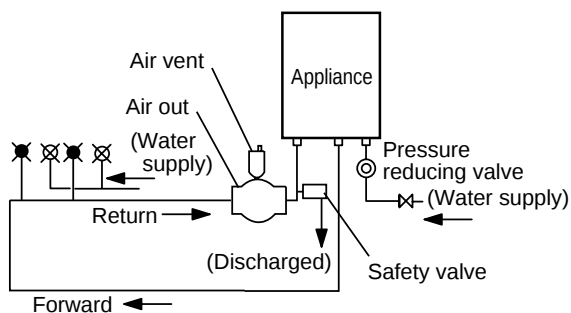


6. Expanded water shall be handled in the following way.

When the instant hot water function is used, the volume of the water within the pipe expands, so this must be followed.

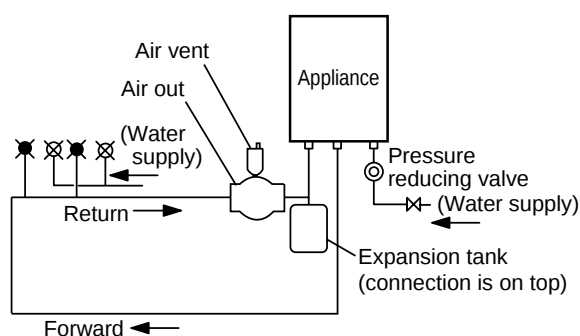
Method using the safety valve

(As expanded water is discharged through the safety valve, water must be run off.)

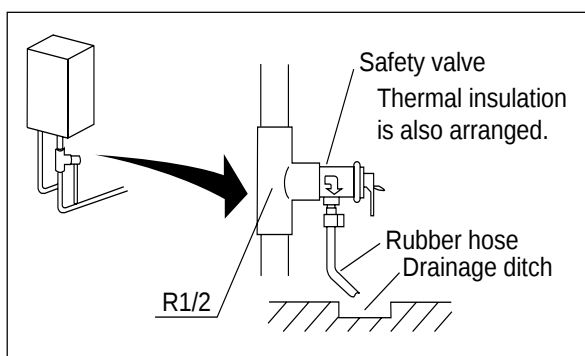


Method using the expansion tank

(In situations where the water cannot be discharged)

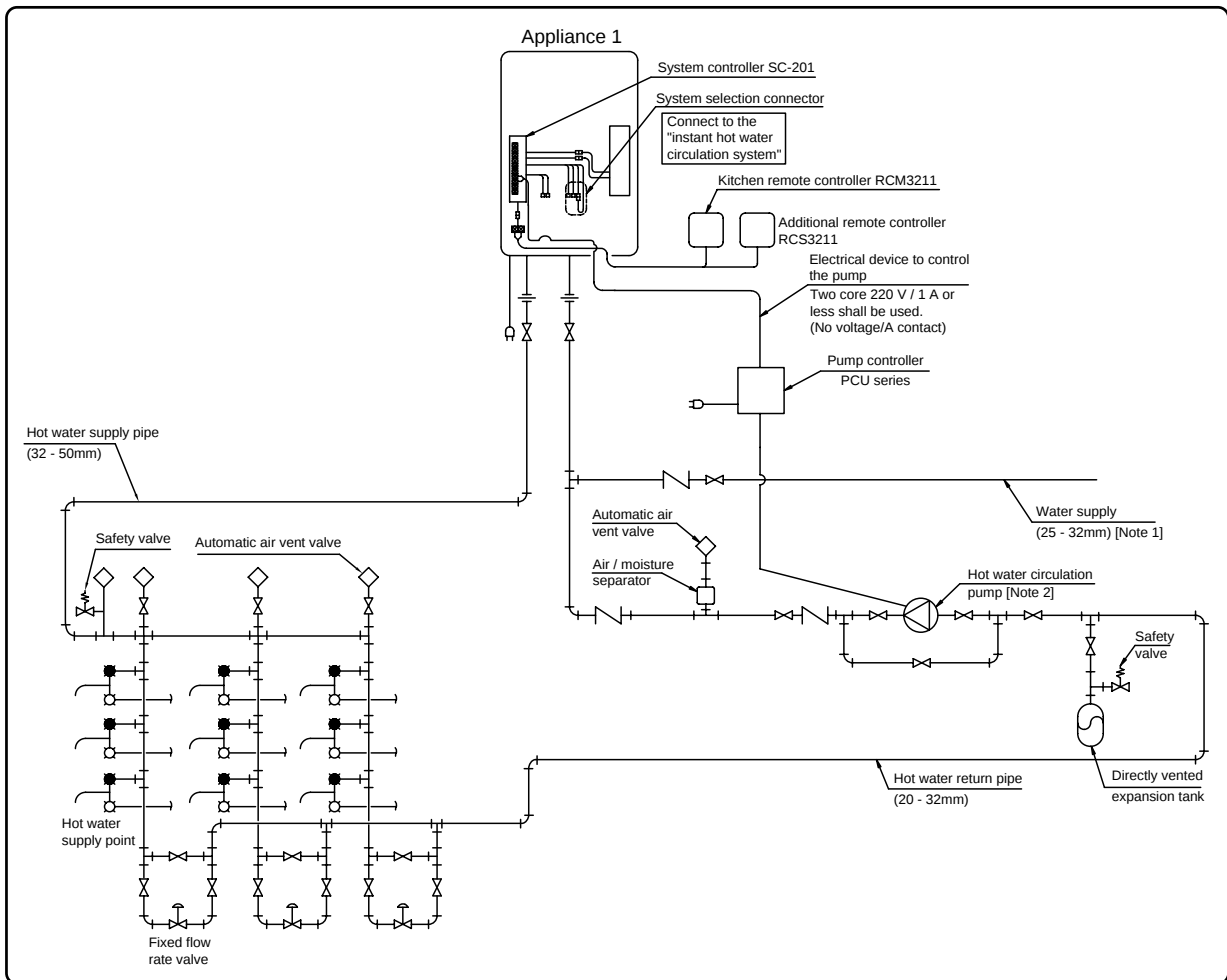


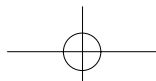
- If the water input pressure (static sound pressure) is up to 392 kPa;
Safety valve X 1
- If the water input pressure (static sound pressure) is 392 kPa or more;
Pressure reduction valve X 1 +
Safety valve X 1
- Safety valve
687 kPa set up
- Pressure reduction valve
196 kPa set up
(to be arranged on site)
392 kPa set up
(to be arranged on site)
- The expansion tank shall be installed on the return line.
- The expansion tank shall be installed with the connector on top as per the above illustration.



- * In order to prevent air pockets in the circulation pump, air outlet / air vent shall be installed near the appliance on the return line.
- * The pipe must be firmly secured. If it is not secured firmly, abnormal noise may be generated when the circulation pump is running.
- * Thermal insulation suited to the location must be used to prevent the pipe from freezing.

10. Plumbing Applications





11. Electrical Wiring

Consult a qualified electrician for the electrical work.



Do not connect electrical power to the unit until all electrical wiring has been completed.

This appliance must be electrically grounded in accordance with Electrical Authority Regulations.

Caution: Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

Verify proper operation after servicing.

Field wiring to be performed at time of appliance installation.



Caution

Do not turn on the power until the electrical wiring is finished.
This may cause electrical shock or damage to the equipment to occur.

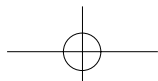
- The electrical supply required by the water heater is 240V AC at 50 Hz. The power consumption may be up to 135W. Use an appropriate circuit.
- Do not disconnect the power supply when not in use. When the power is off, the freeze prevention in the water heater will not activate, resulting in possible freezing damage.

- Do not let the power cord contact the gas piping.

Tie the redundant power cord outside the water heater. Putting the redundant length of cord inside the water heater may cause electrical interference and faulty operation.

Ground

- To prevent an electric shock, always plug power lead into an earth powerpoint.
- Power source to be within 500mm of the bottom of the unit.



Remote Controller

• Applicable Model

		KM3211WH	KM3211WHQ
Remote controller	Main	RCM3211	RCM3211 (included)

* Up to three remote controllers can be connected. Additional remote controllers cannot be connected by themselves.

- The remote controller must be installed in accordance with the installation manual enclosed in the package.
- KM3211WHQ cannot be used without a remote controller (main appliance body only).

Changing the temperature for operation of the main body

Can be used without the remote controller (main appliance only). The hot water temperature on the RCM3211 can be switched between four settings (75, 60, 50, & 40°C). Refer to the following for the setup method. When 75 or 60°C is set, the water is very hot, so make sure that a mixing valve is installed.

- Press the [▲] or [▼] button on the remote controller prior to switching on the controller. Changes must be made within 10 minutes of the power being supplied to the unit. If the display does not switch to maintenance mode despite pressing the [▲] or [▼] buttons, unplug the power and repeat the above procedure.
- The item number and data are shown as well as "Maintenance". (Initial setting for the item number is "99".)
- When the [▲] button is pressed, the "99" displayed will change to 10, 11, ..., 1F, 20, 21, etc..., and conversely when the [▼] button is pressed, the "99" displayed will change to 10, FF, FE, FD, FC, 27, etc...
- 14 and 15 are set as per procedure 3. When the setup switch is pressed, "ON" or "OFF" blink.

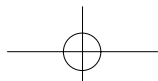
Temp. \ Item No.	14	15
40°C	ON	ON
50°C	OFF	ON
60°C	OFF	OFF
75°C	ON	OFF

* Factory Default Setting

- Press [▲] button to switch between ON and OFF.

Note: The setting changes can be cancelled by pressing the Power On/Off button before confirming the settings, or if the unit is left alone for ten minutes without confirming the settings. If the default setting needs to be changed again, disconnect the electrical power to the unit, reconnect it and follow this procedure again.

- Once setup is complete, press the [▲] and [▼] buttons simultaneously for at least five seconds while the item number is blinking. Once completed, a buzzer sounds. (The modified setup will not be recorded unless this step is performed.)



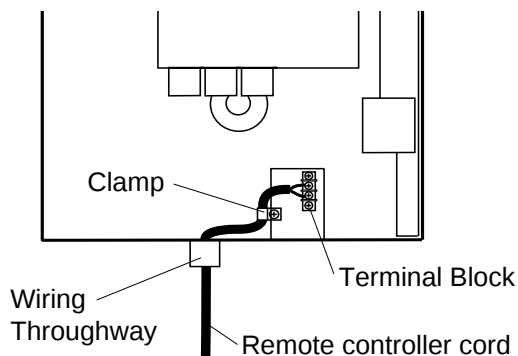
Connecting Remote Controller Cord to Unit

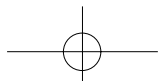
- Keep the remote controller cord away from the freeze prevention heaters in the unit.
- Tie the redundant cord outside the water heater. Do not put the extra length inside the equipment.
- The remote controller cord can be extended up to 100m with Remote controller cord.
- Use a Y type terminal with a resin sleeve. (Without the sleeve, the copper wire may corrode and cause problems).
- Be sure to hand tighten when screwing to the terminal block. Power tools may cause damage to the terminal block.

Remote controller cord

- Use Remote controller cord for any extensions.
- Install according to the National Electrical Code and all applicable local codes.

1. Remove the front cover of the heater (4 screws).
2. Pass the remote controller cord through the wiring throughway and into the unit.
3. Connect the Y terminals at the end of the remote controller cord to the terminal block.
4. Secure the remote controller cord with a clamp.
5. Replace the front cover.





12. Commissioning

The installer should test operate the unit, explain to the customer how to use the unit, and give the owner this manual before leaving the installation

- Preparation ... (1) Ensure all lines are purged / flushed of debris prior to connection to appliance.
(2) Open the shut off valve on the water supply, check that water passes through the valve and close the valve.
(3) Open the gas supply valve, turn on the power supply, and turn on the Operation switch on the remote controller (the Operation lamp turns on) .

- (1) Open a hot water fixture and confirm that the "Burner On" lamp comes on, and that hot water is being produced. (If necessary, repeat until the air in the gas piping is bled out).
 - * White smoke may be noticed from the exhaust vent during cold weather. However, this is not a malfunction of the unit.
 - * If an "11" error code appears on the remote controller, turn the unit off and then back on again, and then open a hot water fixture again.
 - (2) Change the temperature setting on the remote controller and check that the water temperature changes.
 - If the water heater does not operate normally, refer to "Troubleshooting" in the Operation Manual.
 - * After the trial operation, clean the filter in the cold water inlet.
- <If installed with a quick connect multi-system>
- Turn the system power on with the remote controller.
 - Slowly open a hot water fixture and check that the units ignite sequentially. Check to see that the hot water temperature is the same as the temperature displayed on the remote controller. (*1)
 - * If both units do not ignite, switch which unit will ignite first by pressing the Max. or Min. Manifold Pressure Set Button on the circuit board. (*2)

Unit A Ignites
Unit B Doesn't Ignite

Press Max. or Min. Manifold
Pressure Set Button on Unit B

Unit A Doesn't Ignite
Unit B Ignites

- * If an 11 or F11 error code flashes on the remote controller, hit the Power Button on the remote controller off and on 2-3 times.
- * If (*1) and (*2) cannot be done, the Quick Connect Cord may not be properly connected. Check that the cord is properly connected.

⚠ Caution

Handling after trial operation

- In Freezing areas: If the unit will not be used immediately, close off all gas and water shutoff valves, drain all of the water out of the unit and the plumbing system to prevent the unit and system from freezing, and bleed the gas out of the gas line.
Freezing is not covered by the warranty.

Lighting Instructions

This water heater does not have a pilot. It is equipped with an ignition device that automatically lights the burner.

1. Read the safety information in the installation manual or on the front of the water heater.
2. Turn off all electrical power to the unit.
3. Do not attempt to light the burner by hand.
4. Turn the gas control manual valve (external to the unit) clockwise to the off position.
5. Wait five minutes to clear out any gas. If the smell of gas remains, stop, and follow the instructions on page 4 of this manual.
6. Turn the gas control manual valve counterclockwise to the on position.
7. Turn on electric power to the unit.
8. The unit will now operate whenever hot water is called for. If the unit will not operate, follow the shutdown instructions and call a service technician.

Shutdown Instructions

1. Stop any water demand.
2. Turn off electric power.
3. Turn the gas control manual valve clockwise to the off position.

Should overheating occur, or the gas supply fail to shut off, turn off the manual control valve to the appliance.

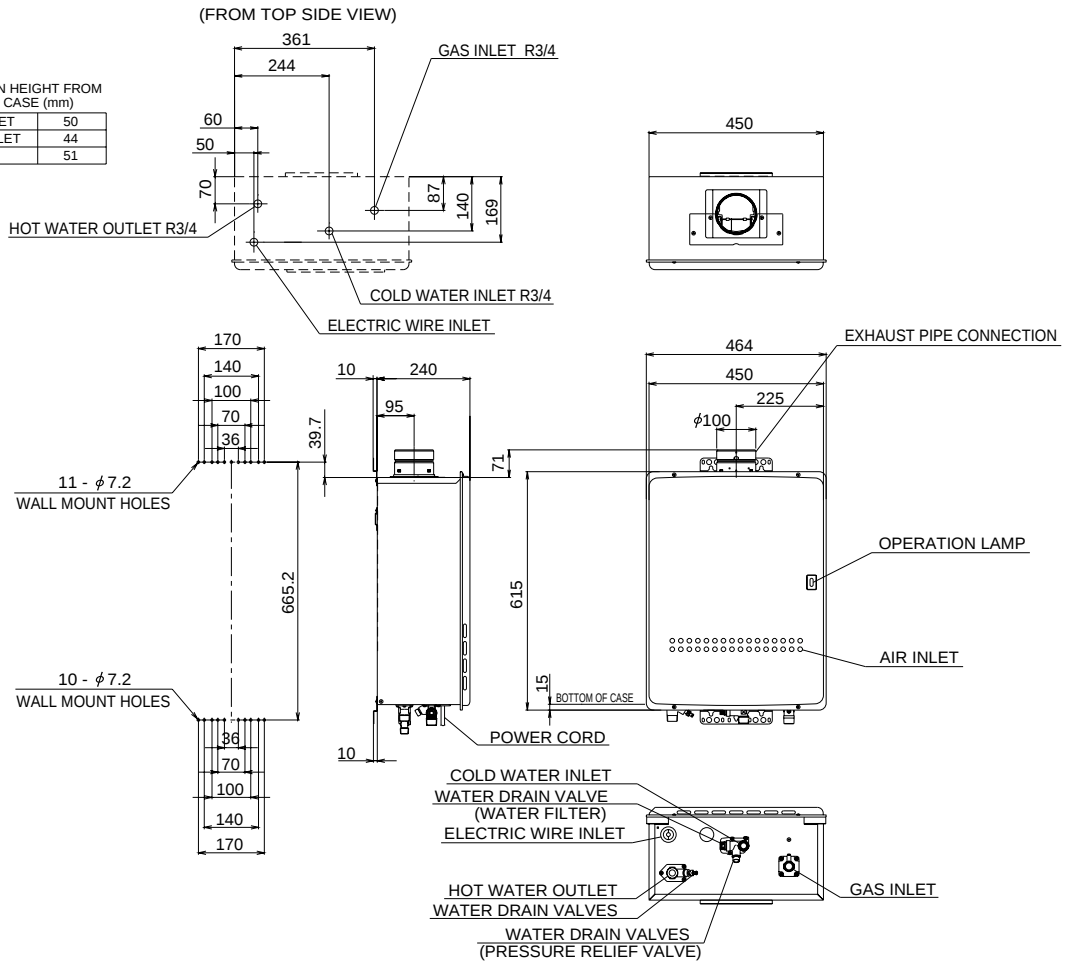
13. Dimensions

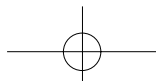
KM3211WH

(unit: mm)

+25A0 CONNECTION HEIGHT FROM
THE BOTTOM OF CASE (mm)

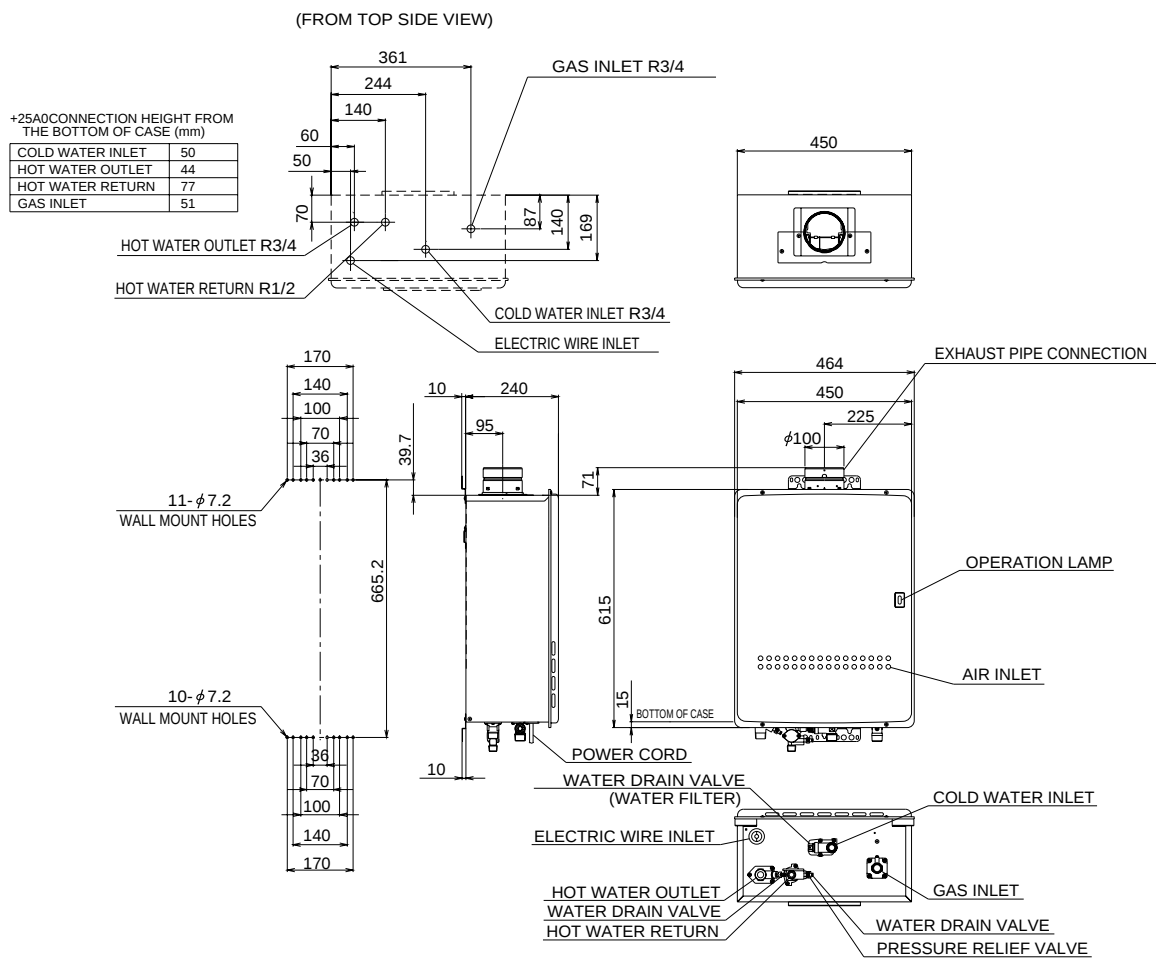
COLD WATER INLET	50
HOT WATER OUTLET	44
GAS INLET	51

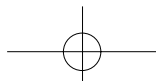




KM3211WHQ

(unit: mm)





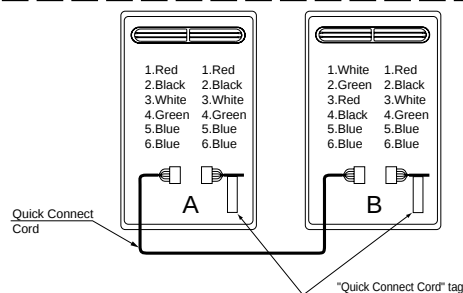
Connecting Quick Connect Cord

For Quick Connect Multi System Installation
use a Quick Connect Cord (Sold Separately).

Caution

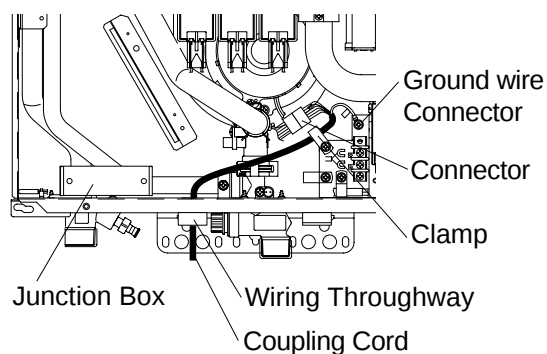
The wire coloring on the Quick Connect Cord will not be the same as the wire coloring from the connection plug inside the unit.

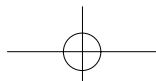
* The remote controller can be connected to either unit A or B.



Instruction for connecting the Quick Connect Cord to each unit:

1. Turn off the power.
2. Remove the front cover of the heater (4 screws).
3. Pass the Quick Connect Cord through the wiring throughway and into the unit.
4. Plug the connector on the Quick Connect Cord to the receptacle inside the unit.
5. Attach the ground wire of the Quick Connect Cord to the terminal block fixing plate.
(If the ground wire is not attached, electrical noise may cause problems)
6. Secure the coupling cord with a clamp.
7. Replace the front cover.





Remarks

Do not drink water that has been inside the unit for an extended period of time. Do not drink the first use of hot water from the unit in the morning.

Clean the filter on the water inlet as frequently as required by the quality of your local water.

Keep the area around the unit clean.

If boxes, weeds, cobwebs, cockroaches etc. are in the vicinity of the unit, damage or fire can result.

Do not install the equipment where the exhaust will blow on walls or windows.

Do not use in areas of poor water quality.

This can cause damage and reduce durability.

If scale forms and a descaling solution must be used, the warranty will be void.

This unit is only approved for installation up to 1372m. above sea level.

Do not use parts other than those specified for this equipment.

Do not disassemble the remote controller.

Do not use petrol, oil or fat detergents to clean the remote controller.

This may cause deformation.

Do not get the remote controller wet.

Although it is water resistant, too much water can cause damage.

Do not splash water on the remote controller. Do not expose the remote controller to steam.

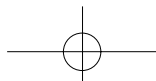
Do not locate the remote controller near stoves or ovens, this may cause damage or failure.

Preventing damage from freezing (P28)

Damage can occur from frozen water within the device and pipes even in warm environments. Be sure to read below for appropriate measures. Repairs for damage caused by freezing are not covered by the warranty.

Take necessary measures to prevent freezing of water and leakage of gas when leaving the unit unused for long periods of time. (P29 - P30)

If it is snowing, check the air inlet, exhaust gas vent and exhaust vent terminal for blockage.



Remote Controller RCM3211

Installation Guide

For Installers:

Read this installation guide carefully before carrying out installation.

Robert Bosch (Australia) Pty. Ltd.

Note

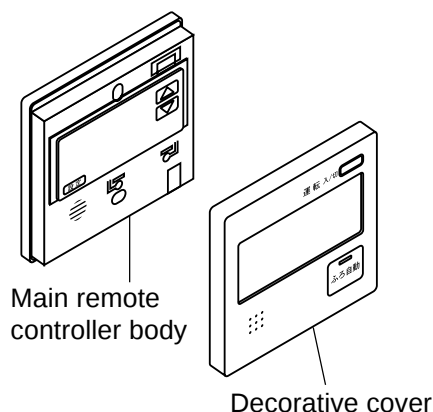
Do not connect power to the water heater before the remote controller has been properly installed.

(1) Remove the decorative cover.

(The decorative cover is attached very simply.)

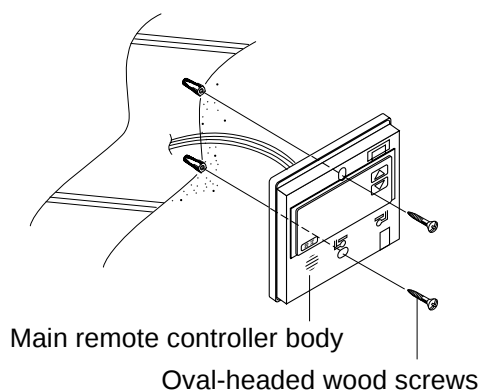
Connect the Y-shaped terminal to the terminal block at the back of the remote controller.

* In the case of exposed wiring (attachment to the wall), first open up the cord intake on the main remote controller body using pliers. (Take care not to damage the board in the process.)

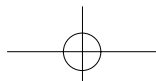


(2) Position the holes (diameter: 6 mm X depth: 25 - 30 mm) to secure the remote controller for the kitchen, and knock in all the raw plugs. Next, secure it using oval-headed wood screws.

* The screws must be tightened manually, and the remote controller secured properly without rattling.



(3) Replace the decorative cover.



Remote Controller RCS3211

Installation Guide

For Installers:

Read this installation guide carefully before carrying out installation.

Robert Bosch (Australia) Pty. Ltd.

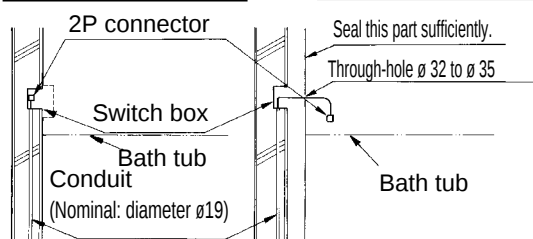
Note

Do not connect power to the water heater before the remote controller has been properly installed.

1. Put the remote controller cord through the wall from the bathroom. Be sure to place the 2P connector at the room side.

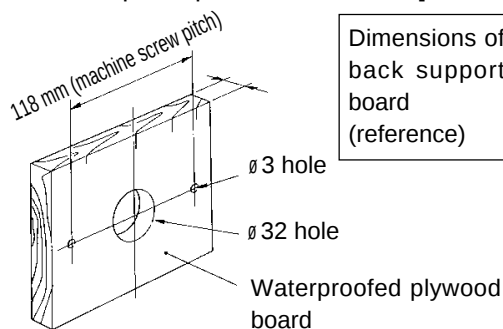
Ordinary bathroom and shower room

Unit bath and shower unit

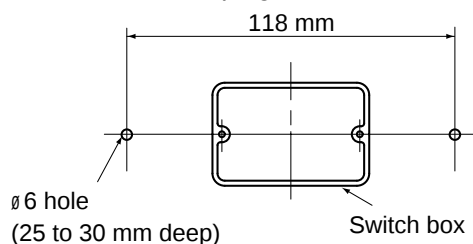


Use the JIS-C83361 switch box for individual use at the remote controller side.

- * A back support board illustrated below is needed to install the remote controller on the wall panel of the bath unit. [Install the back support board at the rear side of the wall panel prior to installation.]



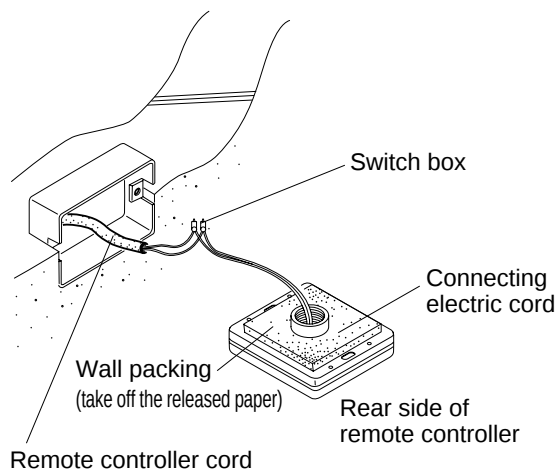
2. Drill two holes (6, 25 to 30 mm deep) on the wall to secure the remote controller case, and embed the wall plugs into the holes.



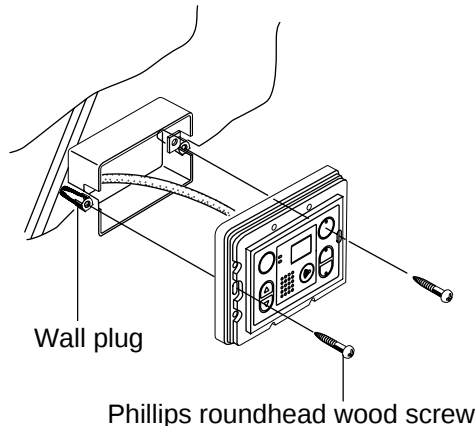
3. Take off the decorative frame from the remote controller.

4. Apply the wall packing to the rear side of the remote controller.

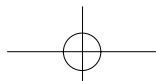
5. Connect the connector.



6. Secure the remote controller with two Phillips roundhead wood screws.



7. Fit the decorative frame on the remote controller.



BOSCH

MODEL **KM3211WHQ**

GAS TYPE LPG
GAS CONSUMPTION 250 MJ/hr
HEAT OUTPUT 55.5 kW
ELECTRICAL RATING AC240V 50Hz
RATED POWER 150 W
HOT WATER SUPPLY CAPACITY
32L/min RAISED 25°C
GAS PRESSURE TEST POINT 1.54 kPa
WATER PRESSURE MAX : 900kPa

SERIAL NUMBER
XXXX.XX - XXXXXX
NORITZ CORPORATION

AGA APPROVAL CERTIFICATION
NUMBER :



XXXX XXXXXX



BOSCH

MODEL **KM3211WHQ**

GAS TYPE NG
GAS CONSUMPTION 250 MJ/hr
HEAT OUTPUT 55.5 kW
ELECTRICAL RATING AC240V 50Hz
RATED POWER 135 W
HOT WATER SUPPLY CAPACITY
32L/min RAISED 25°C
GAS PRESSURE TEST POINT 0.68 kPa
WATER PRESSURE MAX : 900kPa

SERIAL NUMBER
XXXX.XX - XXXXXX
NORITZ CORPORATION

AGA APPROVAL CERTIFICATION
NUMBER :



XXXX XXXXXX



WATER QUALITY

All Bosch water heating appliances are constructed from high quality materials and components and all are certified for compliance with relevant parts of Australian and New Zealand gas, electrical and water standards.

Whilst Bosch water heaters are warranted against defects, the warranty is conditional upon correct installation and use, in accordance with detailed instructions provided with the heater. In the case of the water supplied to the heater, it is important that the water quality be of acceptable standard.

The water quality limits/parameters listed in water quality table are considered acceptable and generally, Australian and New Zealand suburban water supplies fall within these limits/parameters.

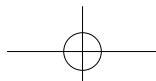
In areas of Australia and New Zealand where water may be supplied, either fully or partly, from bores, artesian wells or similar, one or more of the important limits may well be exceeded and the heater could, therefore, be at risk of failure.

Where uncertainty exists concerning water quality, intending appliance users should seek a water analysis from the water supplying authority and in cases where it is established that the water supply does not meet the quality requirements of the water quality table, the Bosch warranty would not apply.

WATER QUALITY TABLE

Maximum levels

pH	Saturation Index(LSI) (langelier)	Total Hardness	Chlorides	Sodium	Iron
6.5-9	+0.4 to Minus 1.0 @ 65C	200mg/l	250mg/l	180mg/l	1mg/l



Robert Bosch (Australia) Pty Ltd (Bosch)
Manufacturer's Warranty
(Applicable for purchases from 1 January 2012)

All Bosch hot water units are carefully checked, tested and subject to stringent quality controls.

1. Warranty

Bosch offers, at its option, to repair or exchange this Bosch hot water unit or the relevant part listed in clause 2 below at no charge, if it becomes faulty or defective in manufacture or materials during the warranty period also stated in clause 2. This warranty is offered in addition to any other rights or remedies held by a consumer at law.

2. Warranty periods & coverage

- (a) Domestic applications: 3 years (parts and labour)
- (b) Heat exchangers used in domestic applications: 10 years (part only)
- (c) Commercial applications: 2 years (parts and labour)
- (d) Heat exchangers used in commercial applications: 5 years (part only)

All warranty periods commence on the date of purchase of the hot water unit by the end-user. However, where the date of purchase by the end-user is more than 24 months after the date of manufacture, all warranty periods will automatically commence 24 months after the date of manufacture.

3. Warranty exclusions

This warranty is VOID if any damage to or failure of the hot water unit is caused wholly or partly by:

- (a) faulty installation
- (b) neglect, misuse, accidental or non-accidental damage, failure to follow instructions
- (c) use of the unit for purposes other than which it was designed or approved
- (d) unauthorised repairs or alterations to the unit without Bosch's consent
- (e) use of unauthorised parts and accessories without Bosch's consent
- (f) use of non-potable water or bore water in the hot water unit (see product instructions for further details)
- (g) continued use after a fault becomes known or apparent.

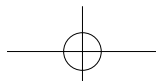
This warranty DOES NOT include:

- (a) costs of consumables or accessories
- (b) wear and tear, normal or scheduled maintenance
- (c) to the extent permitted by law, any damage to property, personal injury, direct or indirect loss, consequential losses or other expenses
- (d) changes in the condition or operational qualities of the hot water unit due to incorrect storage or mounting or due to climatic, environmental or other influences.

NOTE: Any service call costs incurred by the owner or user of the hot water unit for any matter not covered by the terms of this warranty will not be reimbursed by Bosch, even if those costs are incurred during the warranty period. If the hot water unit is located outside the usual operating area of a Bosch service agent, the agent's travel, freight or similar costs are not covered by this warranty and must be paid by the owner or user of the hot water unit.

4. Warranty conditions

- (a) Proof of purchase may be required.
- (b) The hot water unit must be installed by an authorised and licensed installer.
- (c) Proof may be required of the date of installation and correct commissioning of the hot water unit has been carried out to Bosch's satisfaction (such as a certificate of compliance).
- (d) Repair or replacement of the hot water unit or any parts under this warranty does not lengthen or renew the warranty period.



- (e) This warranty is not transferable and is only offered to the original purchaser of the hot water unit.
- (f) No employee or agent of Bosch is authorised to amend the terms of this warranty.
- (g) This warranty only applies to Bosch hot water units purchased from an authorised reseller and installed in Australia or New Zealand.
- (h) To the extent that any condition or warranty implied by law is excludable, such condition or warranty is excluded.

5. How to lodge a warranty claim and warranty procedure

- (a) Warranty claims must be made with the Bosch Customer Contact Centre (Australia: ph 1300 307 037; New Zealand: ph 0800 543 352). Please be ready to provide the model and serial numbers, date of installation, purchase details and a full description of the problem. Warranty claims must be made before the end of the warranty period.
- (b) All warranty service calls must be conducted by an authorised Bosch service agent.
- (c) Invoices for attendance and repair of a hot water unit by third parties not authorised by Bosch will not be accepted for payment by Bosch.

6. Privacy Act 1988 (Cth)

A customer's personal information collected during warranty claims may be used for the provision of customer support, for the provision of information about products and services and for other marketing activities undertaken by Bosch and its Bosch Service Agents who are authorised to carry out warranty repairs on behalf of Bosch (**Purpose**). Bosch is committed to protecting the privacy of its customers' personal information. It will act in compliance with the National Privacy Principles and *Privacy Act 1988* (Cth). Bosch will not forward customers' personal information to third parties other than for the Purpose. A customer can object at any time to the use of their personal information for the Purpose. Bosch will cease to use a customer's personal information accordingly if an objection is made.

7. Bosch contact details

If you have any questions about this warranty or to lodge a warranty claim, please contact:

Robert Bosch (Australia) Pty Ltd
1555 Centre Road, Clayton, Victoria 3168
Tel: Australia: 1300 307 037
Tel: New Zealand: 0800 543 352

IMPORTANT NOTE FOR AUSTRALIAN CONSUMERS

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.