scharge

0

flue

vertical

0

Horizontal

Pre-engineered solutions



COMMERCIAL CONTINUOUS FLOW incl. COMMPAK® & MULTIPAK®

THE RANGE

Rheem is the biggest name in commercial and industrial water heating. Our Commercial Continuous Flow Water Heater (CFWH) range meets all the demands expected of Rheem products – from luxury homes to the largest commercial hot water application imaginable.

Commpak®

- Pre-engineered and assembled for ease of installation
- Compact wall or floor mount design
- Mains pressure performance without the use of tanks
- Suitable for small to medium sized applications

Commpak Plus®

- Engineered to meet customer requirements
- Dual pumps provide back up and redundancy
- Staged system operation
- Suitable for large applications

Multipak®

- Plug and Play simply connects to the plumbing services
- Staged delivery on demand
- 50°C and up to 82°C models
- Left or right hand plumbing

Individual Continuous Flow

- Indoor and outdoor models
- 50°C limited models
- Commercial models up to 82°C
- Full range of accessories including Rheem flue components



OUTDOOR MODEL



INDOOR MODEL



Commpak Plus

COMMERCIAL CONTINUOUS FLOW WATER HEATING

Rheem Commercial CFWH have unique features that provide added safety and functionality.

- Up to 5.8 Star energy rating water heater¹⁶
- Q-factor® provides constant temperature at the outlet rapidly
- Unique Flame Safe® technology detects heat exchanger faults and shuts the system down

- Frost protection is supplied standard
- Backed by Rheem's nationwide service network and a 5 year commercial warranty¹⁷
- Suitable from the smallest to the largest hot water demand applications using the Multipak® and Commpak® platforms
- 50°C models certified to AS3498 negate the need for further tempering¹⁸. 82°C models are suitable for sanitising applications
- EZ Link® two units together with a Deluxe Kitchen Temperature Controller for greater capacity. Max 60°C
- The range includes outdoor models and indoor models with Rheem supplied flue kits. Models are available for use on either natural or propane gas

CFWH TECHNICAL DATA

| RHEEM COMMERCIAL CONTINUOUS FLOW | | OUTDOOR I | MODELS | INDOOR MODELS | | |
|-------------------------------------------------------------------|-------|---------------------------------------------------|-----------------------------------|---------------------------------------------------|-----------------------------------|--|
| Model | | 872027 | 876027 | 862027 | 866027 | |
| Delivery Temperature | | up to 82°C | 50°C per AS3498 | up to 82°C | 50°C per AS3498 | |
| Input | MJ/h | 205 | 205 | 205 | 205 | |
| Output | kW | 46 | 46 | 46 | 46 | |
| Gas Energy Rating | Stars | 5.8 | 5.8 | 5.6 | 5.6 | |
| Flow Rate @ 25°C Rise | L/min | 27 | 27 | 27 | 27 | |
| Minimum Flow Rate | L/min | 2 | 2 | 2 | 2 | |
| Dimensions | | | | | | |
| Height | mm | 600 | 600 | 650 | 650 | |
| Width | mm | 350 | 350 | 350 | 350 | |
| Depth | mm | 225 | 225 | 250 | 250 | |
| Frost Protection | | yes | yes | yes | yes | |
| Approximate Weight | kg | 23 | 23 | 23 | 23 | |
| Inlet/Outlet Connections | BSPM | R ³ / ₄ /20 | R ³ / ₄ /20 | R ³ / ₄ /20 | R ³ / ₄ /20 | |
| Gas Connection | BSPM | R ³ / ₄ /20 | R ³ / ₄ /20 | R ³ / ₄ /20 | R ³ / ₄ /20 | |
| Water Supply Pressure | | | | | | |
| Maximum | kPa | 1000 | 1000 | 1000 | 1000 | |
| Minimum | kPa | 140 | 140 | 140 | 140 | |
| Gas Supply Pressure Range | | | | | | |
| Natural Gas | kPa | 1.13 – 3.5 | 1.13 – 3.5 | 1.13 – 3.5 | 1.13 - 3.5 | |
| Propane | kPa | 2.75 – 3.5 | 2.75 – 3.5 | 2.75 – 3.5 | 2.75 – 3.5 | |
| Temperature Settings | °C | 38, 40, 42, 43, 45, 50, 55, 60, 65, 70, 75, 82 | 38, 40, 42, 43, 45, 50 | 38, 40, 42, 43, 45, 50, 55, 60, 65, 70, 75, 82 | 38, 40, 42, 43, 45, 50 | |
| Factory Set Temperature | °C | 60 | 50 | 60 | 50 | |
| Co-Axial Flue Specification | | | | | | |
| Inner – Material/Diameter | mm | NA | NA | 316SS/75 | 316SS/75 | |
| Outer - Material/Diameter | mm | NA | NA | Aluminised Steel/125 | Aluminised Steel/125 | |
| Maximum Flue Run | | NA | NA | 9m & 3 x 90° Bends | 9m & 3 x 90° Bends | |
| Accessories | | | | | | |
| Pipe Cover | | 299830 | 299830 | NA | NA | |
| Recess Box | | 299831 | 299831 | NA | NA | |
| Security Bracket | | 299868 | 299868 | 299868 | 299868 | |
| Security Cage | | 299867 | 299867 | NA | NA | |
| EZ Link® Kit Max 60°C (Deluxe Kitchen Controller not included) | | 290141 | 290141 | 290141 | 290141 | |
| Deluxe Temperature Controllers (Max 60°C) | | | | | | |
| Kitchen | | 299858 | 299858 | 299858 | 299858 | |
| Bathroom 1 | | 299859 | 299859 | 299859 | 299859 | |
| Bathroom 2 | | 299860 | 299860 | 299860 | 299860 | |

¹⁶ Outdoor Model.

setting exceeding 75°C.

Warranty*: 5 years heat exchanger with a thermostat setting not exceeding 75°C, 12 months parts and labour. 12 months heat exchanger warranty when used with a thermostat

^{*}Conditions apply: For full terms and conditions please contact Rheem or see Owner's Guide and Installation Instructions, available at www.rheem.com.au

^{18 50°}C limited systems are suitable for dead leg applications only. Further tempering may be required. Consult AS3500.4 for details.

COMMERCIAL CONTINUOUS FLOW incl. COMMPAK® & MULTIPAK®

INDOOR INSTALLATION

The Rheem 27 CFWH is available in models suitable for indoor installation. The flue system is room sealed coaxial design manufactured from high grade stainless steel inner and aluminised steel outer.

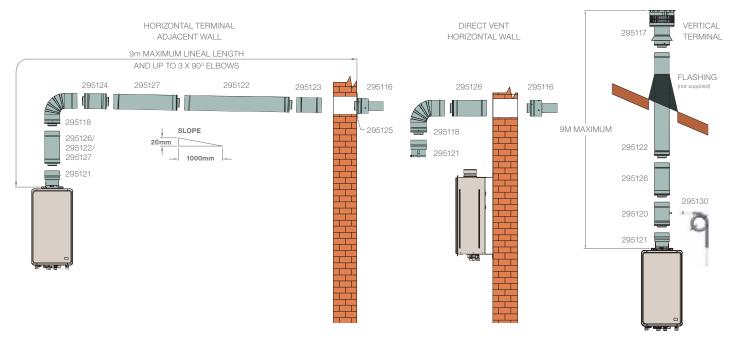
The flue system is certified for up to 9m lineal run and 3 x 90° bends and is suitable for vertical or horizontal

termination when used with the appropriate terminal.

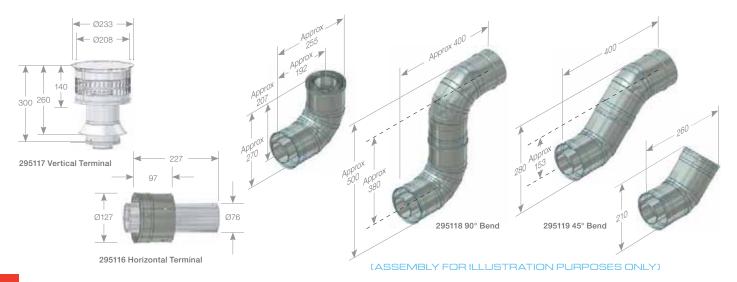
Separate ventilation for combustion is not required as the air for combustion is supplied in the flue outer. The flue system can be installed with zero clearances from combustible materials. Flue termination must comply with the requirements of AS5601.



RHEEM CONTINUOUS FLOW FLUE SYSTEM



RHEEM CONTINUOUS FLOW FLUE COMPONENTS



How to Size

Use the following as a guide to selecting the flue components required. The overall dimension of each flue piece is shown in the drawings. Allow approximately 35mm for insertion of each flue piece.

Determine the lineal distance and number of 45° and/or 90° bends between the top of the water heater and flue terminal. Note, the bottom edge of a vertical flue terminal must be 500mm

away from the nearest structure in accordance with AS5601.

Flashing is required to be installed where a vertical flue section penetrates the roof line (not supplied).

Where a condensate drain section is installed, the hose must be connected and drained to the sewer waste or outside. A condensate trap must be installed and filled with water to prevent spillage of products of combustion.

- Flue penetrations through walls and ceilings must be sealed in accordance with local fire regulations
- Pheem CFWH are certified for installation with the terminals closer than that specified in AS5601.

Adjacent water heaters may be installed with zero clearance between the water heaters.



Rheem indoor CFWH must only be installed using certified Rheem coaxial flue components. Do not use any other type of flue system. Carefully follow the installation instructions.

Use the following table as a guide to selecting Rheem Continuous Flow flue components:

| P/NO | DESCRIPTION | WHERE USED |
|--------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 295116 | Horizontal Terminal | Required where flue terminates horizontally |
| 295117 | Vertical Terminal | Required where flue terminates vertically |
| 295118 | 90° Bend | Maximum of 3 per installation |
| 295119 | 45° Bend | Maximum of 6 per installation (with no 90° bends) |
| 295120 | Condensate Drain | Can be located in vertical or horizontal section. Required for: – Vertically terminating flue systems – Horizontally terminating flue systems with vertical flue sections |
| 295121 | Water Heater / Flue Adapter | Required for each water heater to connect to flue system |
| 295122 | Straight Length 900mm | Long straight sections |
| 295123 | Female Female Adapter | Required to reverse flue pipe direction to allow condensate to drain away correctly from water heater in long horizontal sections of horizontally terminating flues |
| 295124 | Male Male Adapter | Required to reverse flue pipe direction to allow condensate to drain away correctly from water heater in long horizontal sections of horizontally terminating flues |
| 295125 | Trim Ring (optional) | Conceal internal and/or external hole in wall for horizontally terminating flues |
| 295126 | Straight Length 300mm | Short straight sections |
| 295127 | Adjustable Length 560 – 890mm | Allows to trim flue to exact length required |
| 295129 | Bracket | Support flue at intervals not exceeding 2m and after any bend |
| 295130 | Condensate Trap | Required with every condensate drain. Can be connected to a common waste |



COMMERCIAL CONTINUOUS FLOW incl. COMMPAK® & MULTIPAK®

MULTIPAK®, COMMPAK® AND COMMPAK PLUS®

The Rheem Commpak range has been developed to provide a pre-engineered solution for commercial hot water applications. Starting with systems as small as two Commercial Continuous Flow through to systems as large as you can imagine.

All systems are pre-assembled on a sturdy aluminium frame, which can be wall or floor mounted depending on system size. A range of options are available with all systems.



Multipak®

The range starts with Multipak, which is a staged ignition system available in models comprising two to six Commercial Continuous Flow units. Typically used where large demands are required intermittently, such as in sports clubs. In 60°C temperature mode, Multipak is suitable for use in dead leg and recirculation systems. 50°C limited models are suitable for dead leg applications only.

Commpak®

Featuring mass-flow technology
Commpak combines sophisticated
electronics and pump technology to
equalise hot and cold water pressures.
A differential set point combined with
the thermal mass in the system piping
replicates storage. The result is mains
pressure performance without the need
for storage tanks reducing overall plant
footprint and increasing plant efficiency.
Commpak is suitable for small to
medium commercial applications
utilising up to six Commercial
Continuous Flow units.

Commpak Plus®

Where large demands are required, Commpak Plus is the ideal choice. Starting with systems greater than six Commercial Continuous Flow units, Commpak Plus is engineered to meet customer requirements. In-line or back to back arrangements are available to meet plant room space availability. Dual pump and/or control systems are available which allows staging of the system as well as providing redundancy. Commpak Plus has BMS/BAS connectivity and systems are available in temperature delivery from 60°C to 82°C.



Multipak®



Commpak®



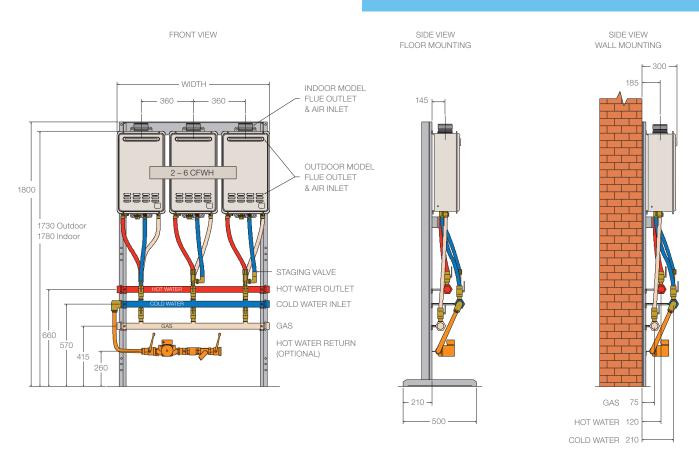
Commpak Plus®

Installation

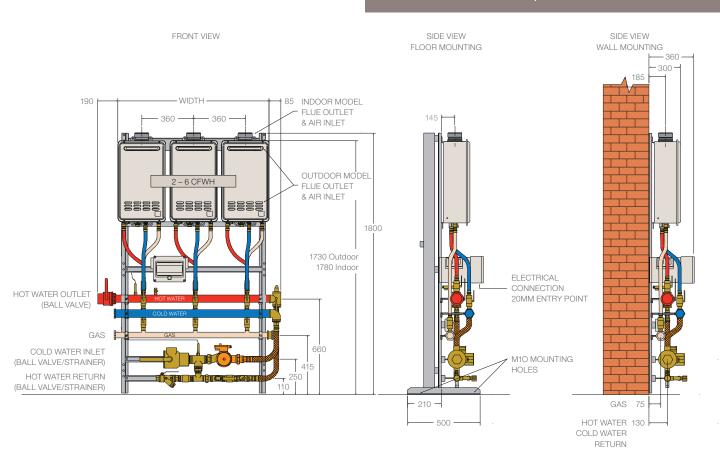
Models designed to deliver temperatures in excess of 60°C can be used as an in line booster to solar pre-heat plant and can be used in conjunction with Rheem Guardian® to provide tempered or warm water.

The entire Commpak range can be specified for installation outdoors or indoors with Rheem supplied coaxial flue kits. Both indoor and outdoor Commercial Continuous Flow units are certified for installation with zero clearance between water heaters.

Mulitpak® Models



Commpak® Models



COMMERCIAL CONTINUOUS FLOW incl. COMMPAK® & MULTIPAK®

COMMPAK AND MULTIPAK TECHNICAL DATA

| MULTIPAK MODEL | INDOOR OUTDOOR | MPI 02 MPE 02 | MPI 03 MPE 03 | MPI 04 MPE 04 | MPI 05 MPE 05 | MPI 06 MPE 06 |
|-------------------------------|-------------------|------------------------------------|------------------|------------------|------------------|------------------|
| Input | MJ/h | 410 | 615 | 820 | 1,025 | 1,230 |
| Recovery Rate | | | | | | |
| 50°C rise | L/hr | 1,584 | 2,376 | 3,168 | 3,960 | 4,752 |
| 25°C rise | L/hr | 3,168 | 4,752 | 6,336 | 7,920 | 9,504 |
| Maximum Flow Rate | | | | | | |
| 50°C rise | L/min | 27 | 41 | 54 | 68 | 81 |
| 25°C rise | L/min | 54 | 81 | 108 | 135 | 163 |
| Minimum Flow Rate | L/min | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Approx Weight | kg | 95 | 120 | 185 | 210 | 235 |
| Wall Mount | | standard | standard | standard | standard | standard |
| Free Standing Frame (FSF) | | optional | optional | optional | optional | optional |
| Cold Water | BSPF | RP11/2/40 | RP11/2/40 | RP11/2/40 | RP11/2/40 | RP11/2/40 |
| Hot Water | BSPF | RP11/2/40 | RP11/2/40 | RP11/2/40 | RP11/2/40 | RP11/2/40 |
| Gas | BSPM | R1 ¹ / ₂ /40 | R11/2/40 | R111/2/40 | R11/2/40 | R11/2/40 |
| Electrical Supply (240V/50Hz) | Amps | 1.50 | 2.25 | 3.0 | 3.75 | 4.5 |

| COMMPAK MODEL | INDOOR OUTDOOR | CPI 02 CPE 02 | CPI 03 CPE 03 | CPI 04 CPE 04 | CPI 05 CPE 05 | CPI 06 CPE 06 |
|---------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------------------------|
| Input | MJ/h | 410 | 615 | 820 | 1,025 | 1,230 |
| Recovery Rate | | | | | | |
| 50°C rise | L/hr | 1,584 | 2,376 | 3,168 | 3,960 | 4,752 |
| 25°C rise | L/hr | 3,168 | 4,752 | 6,336 | 7,920 | 9,504 |
| Peak Flow Rate | | | | | | |
| 50°C rise | L/min | 27 | 41 | 54 | 68 | 81 |
| 25°C rise | L/min | 54 | 81 | 108 | 135 | 163 |
| Approx Weight | kg | 120 | 150 | 220 | 245 | 270 |
| Wall Mount | | standard | standard | - | - | - |
| Free Standing Frame (FSF) | | optional | optional | standard | standard | standard |
| Cold Water | BSPF | RP2/50 | RP2/50 | RP2/50 | RP2/50 | RP2/50 |
| Hot Water | BSPF | RP2/50 | RP2/50 | RP2/50 | RP2/50 | RP2/50 |
| Gas | BSPM | R11/2/40 | R11/2/40 | R11/2/40 | R11/2/40 | R1 ¹ / ₂ /40 |
| Return | BSPF | RP1/25 | RP1/25 | RP1/25 | RP1/25 | RP1/25 |
| Electrical Supply (240V/50Hz) ¹⁹ | Amps | 3.62 | 4.62 | 5.62 | 6.62 | 7.92 |

| COMMON SPECIFICATIONS | | MPI 02, MPE 02, CPI 02, CPE 02 | MPI 03, MPE 03, CPI 03, CPE 03 | MPI 04, MPE 04, CPI 04, CPE 04 | MPI 05, MPE 05, CPI 05, CPE 05 | MPI 06, MPE 06, CPI 06, CPE 06 |
|------------------------------------------|-----|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Dimensions | | | | | | |
| Height (outdoor / indoor) | mm | 1,730/1,780 | 1,730/1,780 | 1,730/1,780 | 1,730/1,780 | 1,730/1,780 |
| Width (Multipak / Commpak) | mm | 820/970 | 1,180/1,330 | 1,540/1,690 | 1,900/2,050 | 2,260/2,410 |
| Depth (Wall Mount / Free Standing Frame) | mm | 360/500 | 360/500 | 360/500 | 360/500 | 360/500 |
| Clearance in Front (outdoor / indoor) | mm | 800/600 | 800/600 | 800/600 | 800/600 | 800/600 |
| Centre to Centre | mm | 360 | 360 | 360 | 360 | 360 |
| Frost Protection | | Yes | Yes | Yes | Yes | Yes |
| Water Supply Pressure | | | | | | |
| Maximum | kPa | 1,000 | 1,000 | 1,000 | 1,000 | 1,000 |
| Minimum | kPa | 140 | 140 | 140 | 140 | 140 |
| Gas Supply Pressure Range | | | | | | |
| Natural | kPa | 1.13 - 3.5 | 1.13 - 3.5 | 1.13 - 3.5 | 1.13 - 3.5 | 1.13 - 3.5 |
| Propane | kPa | 2.75 - 3.5 | 2.75 - 3.5 | 2.75 - 3.5 | 2.75 - 3.5 | 2.75 - 3.5 |

 $^{^{\}rm 19}$ Single pump add 1.62 Amps for dual pump option.