

TANKPAK SERIES 3



HIGH-VOLUME HOT WATER SOLUTIONS

FOR COMMERCIAL
APPLICATIONS OF
ALL SIZES



INTELLIGENT
CONTROLLER



FAST
INSTALLATION



BMS AND
REMOTE
MONITORING



INCREASED
REDUNDANCY



STEADY, HOT & STRONG

INSTALL A RHEEM®



TANKPAK SERIES 3[®] DELUXE Prebuilt on a frame

For when the specification demands the best



2 TO 18 PAK

STAGE & ROTATE



INTELLIGENT CONTROLLER



BMS AND REMOTE MONITORING



DUTY STANDBY PUMPS



Redundancy features and pump options and remote monitoring increase the system reliability.

Stage/Rotate with Intelligent Controller

Full access to all operational parameters and alarms is made possible via the new smart controller:- on board, or via BMS for total peace of mind.

CFGWH stage as demand increases, reducing energy and extending life by only using the heaters required to meet the demand. Rotation to the next heater occurs on each new call for heat or if a heater is off line.

System Diagnostics with Multiple Sensors

Three sensors monitor tank, building flow and building return temperatures for total system diagnostics.

36 individual alarm points monitored, including blocked filter warning so servicing can be initiated before any loss of system performance.

Duty/Standby Pump Options

Optional duty/standby primary pumps and/or **secondary (building circulator) pumps** supplied on the frame saving plant room space and installation costs.

Auto duty changeover or if a pump is in error provides 100% redundancy.

Secondary pumps cycle on temperature to reduce building energy consumption.

Lighter, Shorter Frames

New frame design is shorter and lighter. New specific 2 bay frame reduces smallest unit width by 360mm and 8kg.

Certified for lifting, and wind rated for buildings up to 15 storeys.

Indoor models are supplied with factory fitted common condensate drains and traps for surety and reduced installation costs.

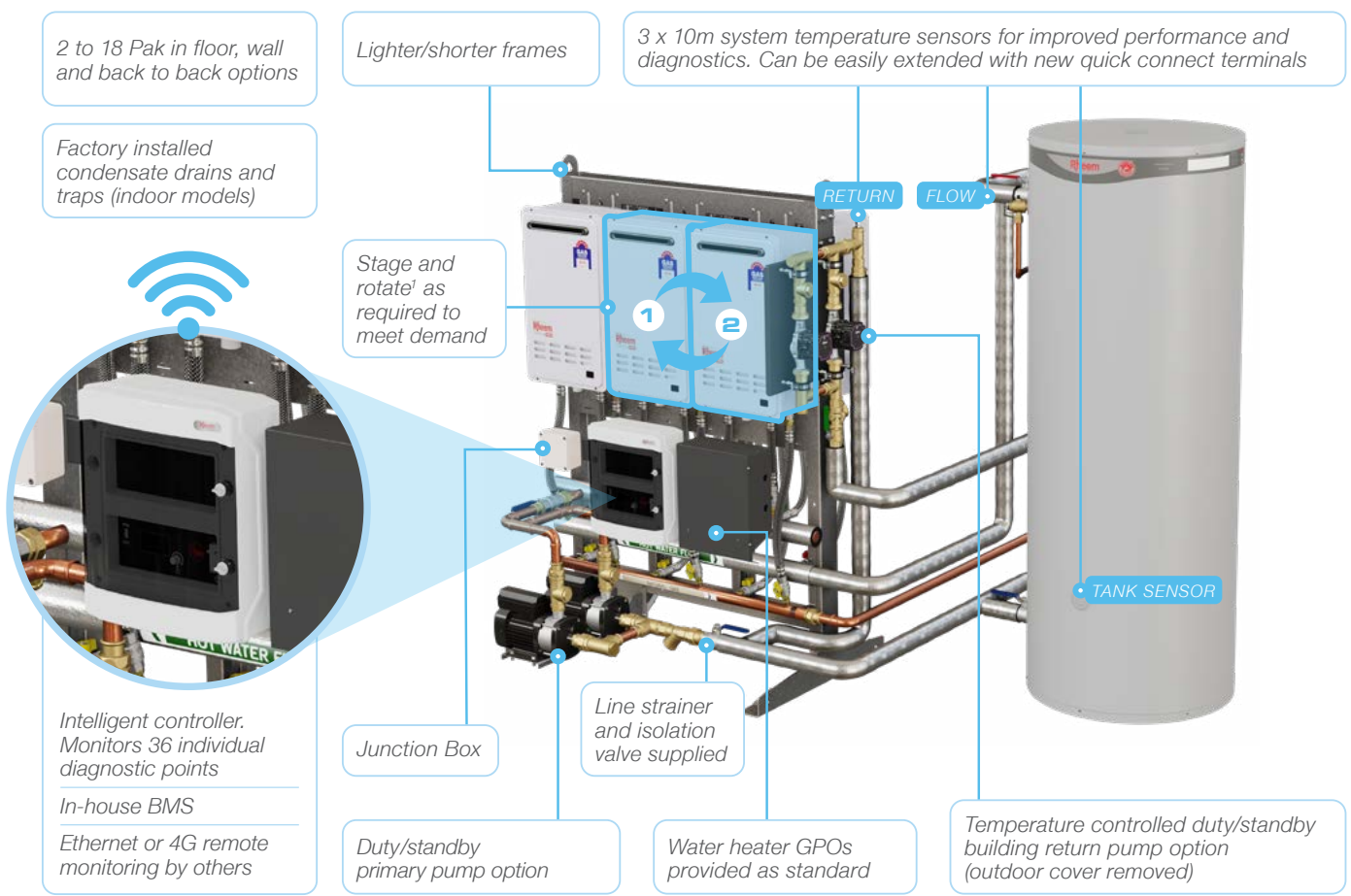


New high efficiency Grundfos UPM series secondary pumps provide greater control of required flow rate for better velocity control.

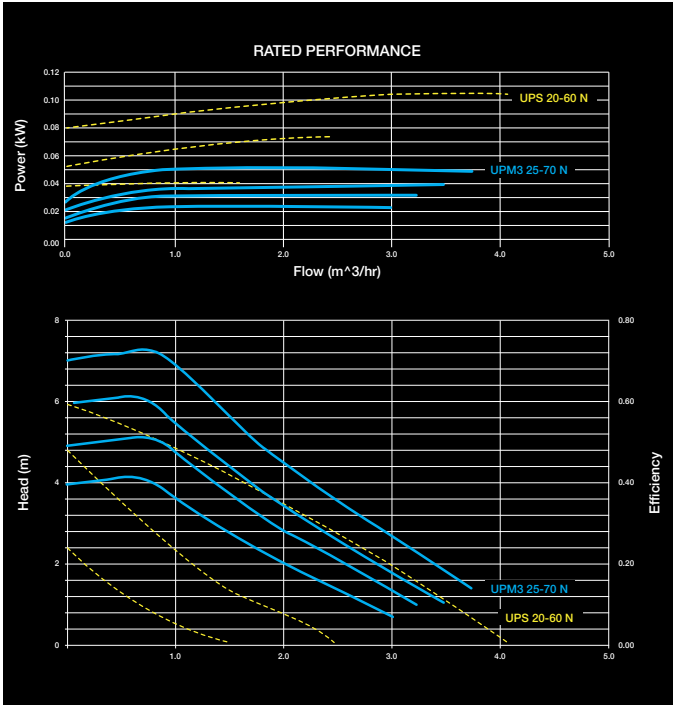
CM3-2 secondary pump option is supplied pre-plumbed but separate to the frame.



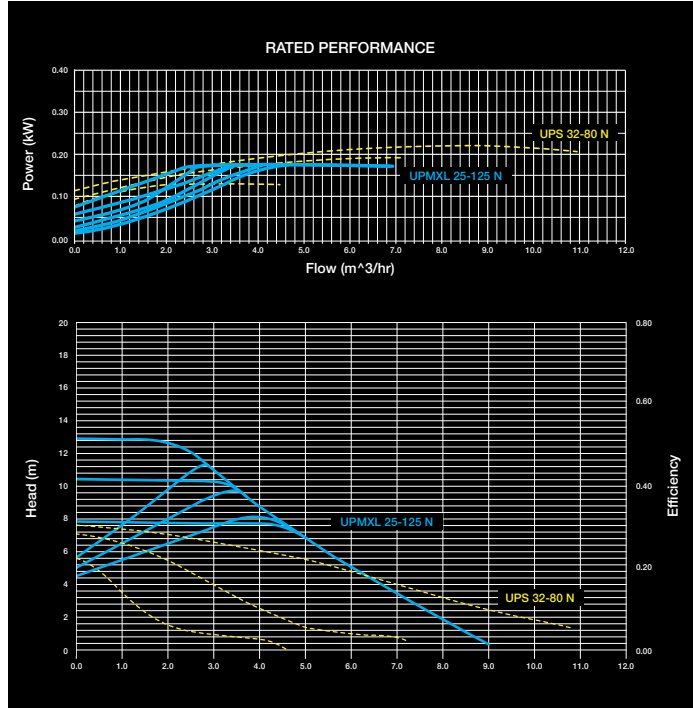
TANKPAK® SERIES 3 DELUXE FEATURES UP CLOSE



**New UPM 3 25-70 & UPS 20-60
Secondary Pump Comparison Curves**



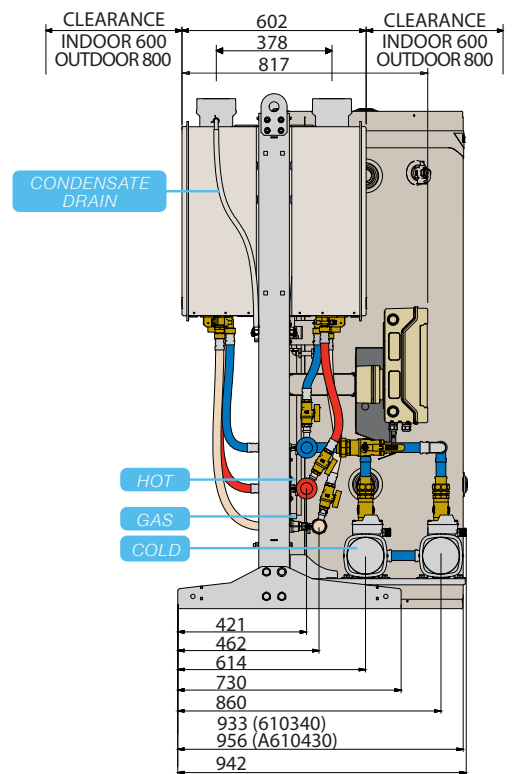
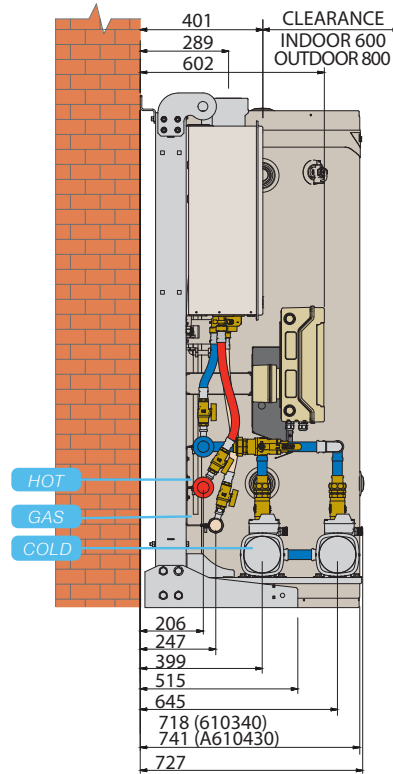
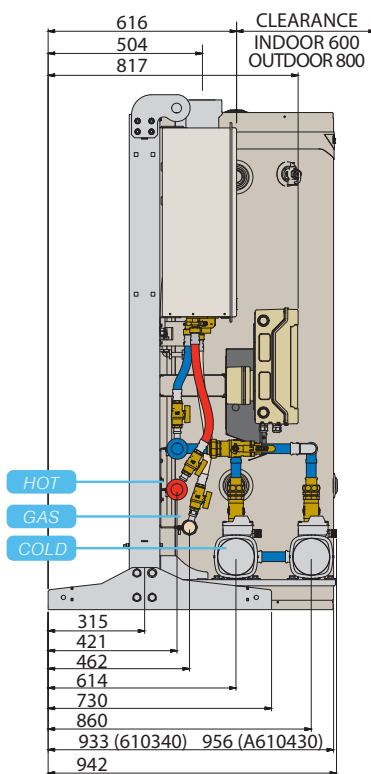
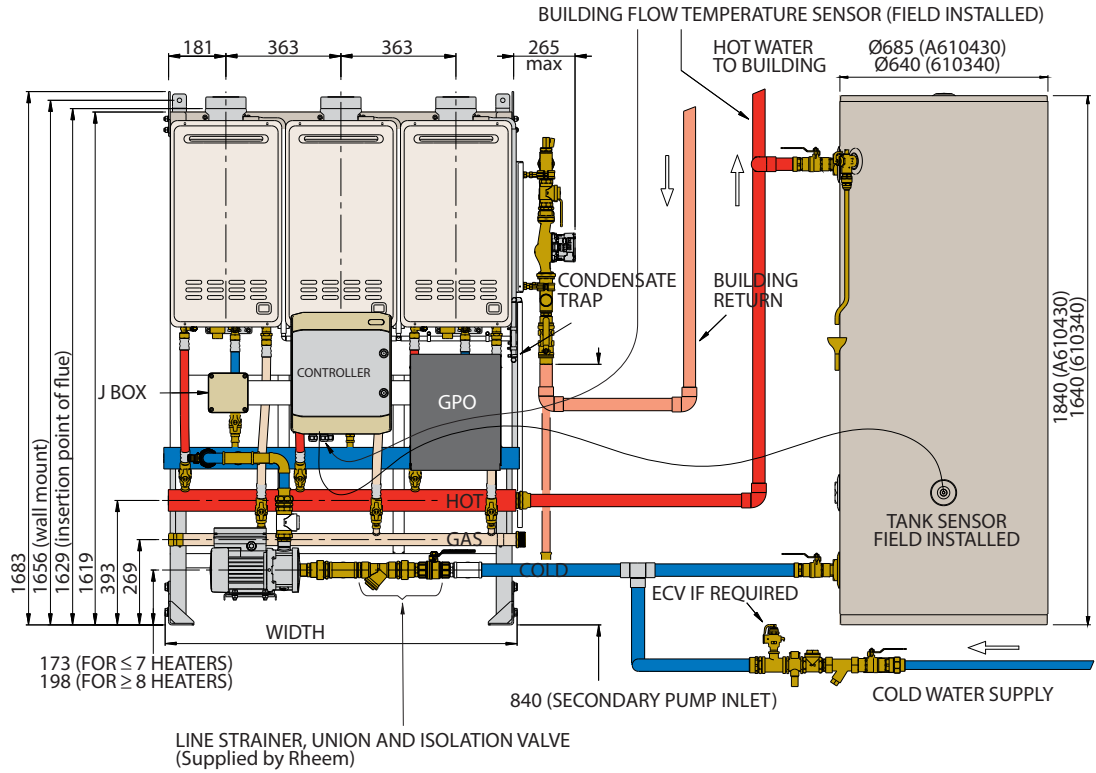
**New UPM XL 25-125 & UPS 32-80
Secondary Pump Comparison Curves**



DELUXE MODEL CONTROLLER WITH TWO PRIMARY PUMPS & TWO SECONDARY PUMPS

WIDTH													
No. of Heaters	2	3	4	5	6	7	8	9	10	12	14	16	18
Inline (mm)	755	1118	1481	1844	2207	2570	2933	3296	-	-	-	-	-
Back to Back (mm)	-	-	755	1118	1118	1481	1481	1844	1844	2207	2570	2933	3296

*All dimensions are reference only.



TANKPAK SERIES 3[®] STANDARD

Prebuilt on a frame

Budget alternative for smaller commercial applications



2 TO 6 PAK

NO FRILLS



STAGE & ROTATE¹



MEETS PEAK DEMAND

Top down heating for faster hot water delivery and better redundancy.



Electronic Staging and Rotation

CFGWH stage¹ as demand increases, reducing energy and extending life by only using the heaters required to meet the demand. Rotation to the next heater occurs on each new call for heat or if a heater is off line.

LED Power/Run/Error indicator with flash codes monitors all aspects of the system for faster servicing.

Warning alarm initiated should water heater filters become blocked so servicing can be initiated before any loss of system performance.

Lighter, Shorter Frames

New frame design is shorter and lighter. New specific 2 bay frame reduces smallest unit width by 360mm and 8kg.

Certified for lifting, and wind rated for buildings up to 15 storeys.

Reduced Installation Costs

Indoor models are supplied with factory fitted common condensate drains and trap for surety and reduced installation costs.

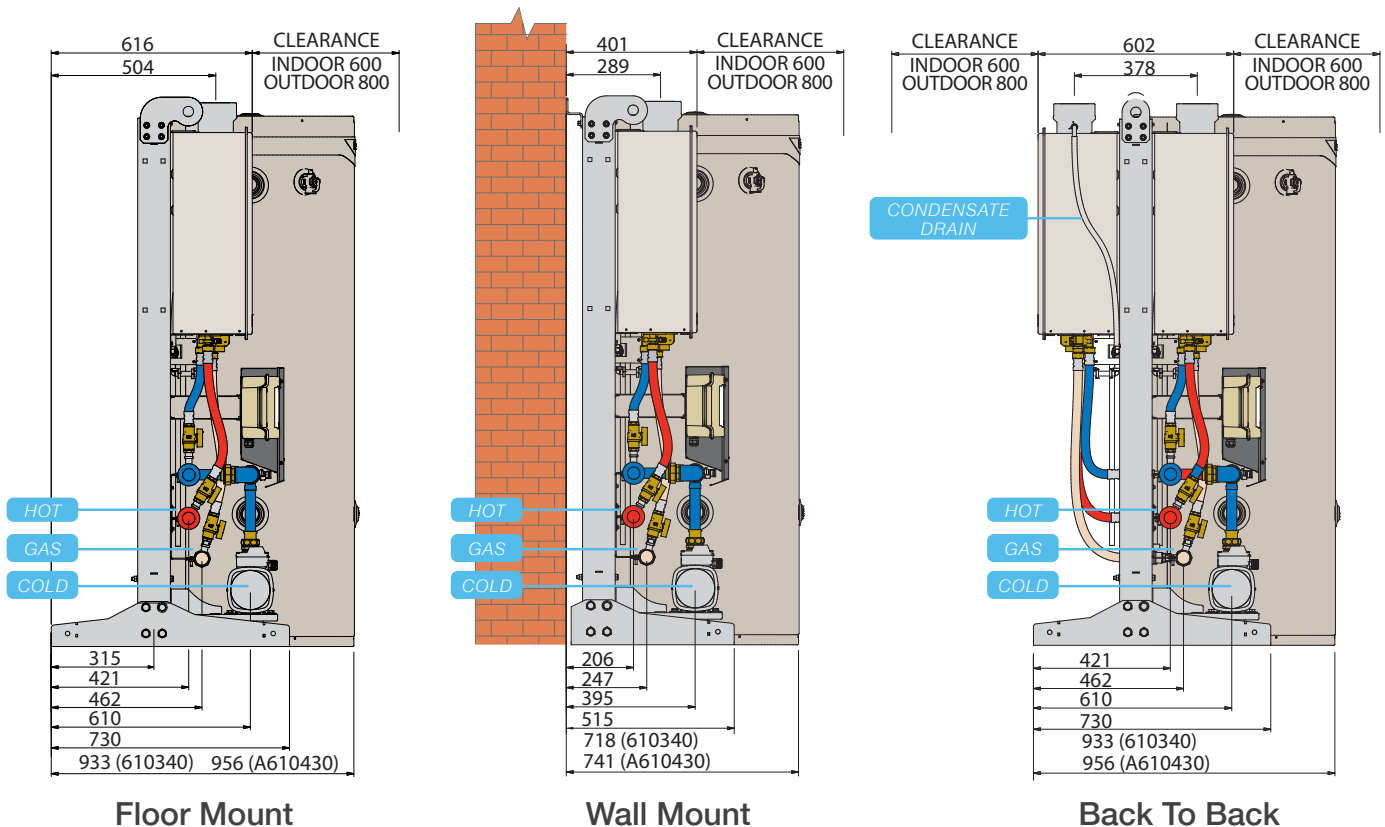
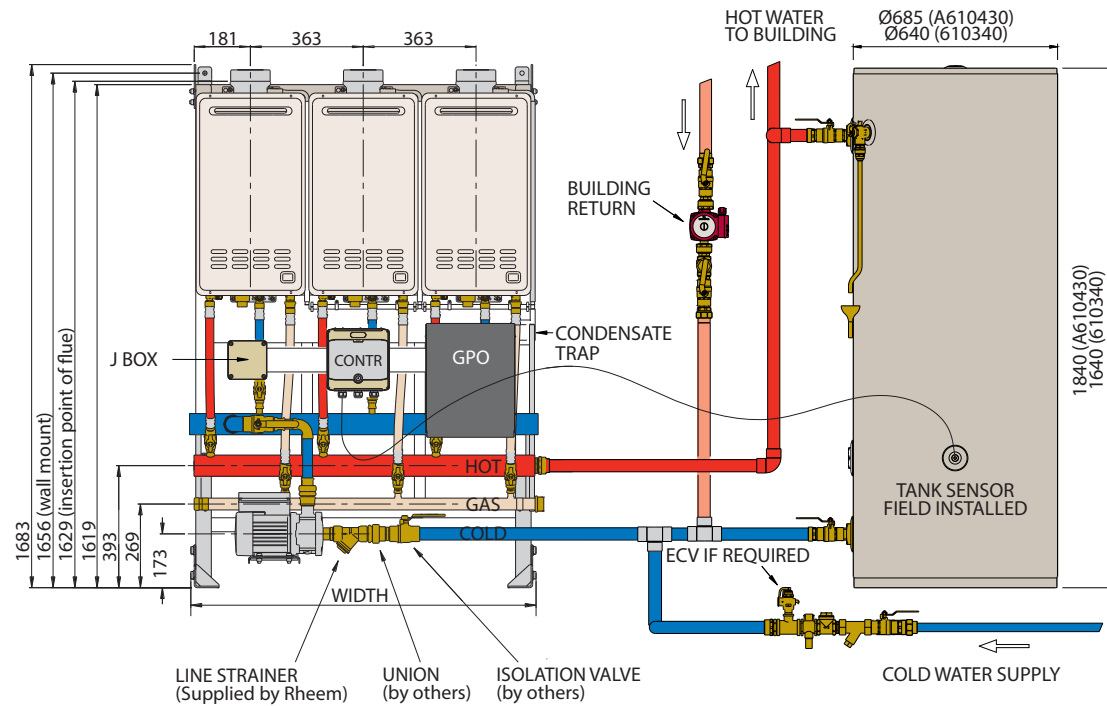
Water heater GPOs are provided as standard.

10Amp plug and lead for all models for a 1 trade install.

STANDARD MODEL CONTROLLER WITH ONE PRIMARY PUMP

WIDTH					
No. of Heaters	2	3	4	5	6
Inline (mm)	755	1118	1481	1844	2207
Back to Back (mm)	-	-	755	1118	1118

*All dimensions are reference only.



TECHNICAL DATA

TANKPAK MODEL	INTERNAL EXTERNAL	TPI 02 TPE 02	TPI 03 TPE 03	TPI 04 TPE 04	TPI 05 TPE 05	TPI 06 TPE 06
Thermal Input	MJ/h	410	615	820	1025	1230
Recovery Rate at 50°C rise	L/hr	1645	2470	3290	4115	4935
Mounting options		W/F	W/F	W/F/B	W/F/B	W/F/B
Standard or Deluxe		Standard or Deluxe				
Storage Tanks		1 x A610340 1 x A610430	1 x A610340 1 x A610430	1 x A610340 1 x A610430	- 1 x A610430	- 1 x A610430
1st Hour Capacity (610340)	Litres	1970	2795	3615	-	-
1st Hour Capacity (610430)	Litres	2055	2880	3700	4525	5345
Electrical Supply 240V 50Hz (STD/DLX) ⁵	Amps	5.1/7.5	5.9/8.3	6.7/9.2	7.9/10.7	8.8/11.5
Electrical Connection STD		1.8m 10A plug and lead				
Electrical Connection DLX		1.8m 10A plug and lead			240V 50Hz single phase hard wired connection	
PHWF & PHWR Pipe Size	mm	25	32	40	40	40
Natural Gas Pipe Size	mm	40	40	50	50	50
Propane Gas Pipe Size	mm	32	32	32	32	32
Weight Empty (F/B) ³ STD	kg	251	288	326/306	390/346	427/370
Weight Empty (F/B) ³ DLX	kg	305	342	380/360	444/400	481/424

PUMP IDENTIFICATION	PUMP MODEL	PUMP PART NUMBER	PRIMARY PUMP	PRIMARY PUMP OPTIONS	SECONDARY PUMP OPTIONS
1	CM3-2	CM3-2 366084	(2 to 4 Pak)	Single pump (STD & DLX) or Duty/Standby (DLX only)	Optional Duty/Standby Skid supplied separately (Deluxe only) P/No AQ33116044
2	CM5-2	CM5-2 366089	(5 to 7 Pak)		NA
3	CM10-1	CM10-1 366094	(8 to 18 Pak)		NA
4	UPM3 (UPS 20-60N equivalent)	} Building recirculation pumps (secondary pumps)			Optional Duty/Standby supplied on frame (Deluxe only)
5	UPMXL (UPS32-80N equivalent)				

PRODUCT CODE IDENTIFICATION						All models available in either ULPG or Natural Gas			
Tankpak Series 3	External or Internal	No. of Heaters	Natural Gas Or ULPG	Back To Back/Floor/Wall	Standard or Deluxe Controller	No. of Primary Pumps	Primary Pump Model	No. of Secondary Pumps	Secondary Model
TP3	E	02-06 (STD)	N	B (04-18)	S (02-06)	1 (STD/DLX)	1 (02-04)	0 (STD/DLX)	0 (NO PUMP)
	I	02-18 (DLX)	L	F (02-09)	D (02-18)	2 (DLX ONLY)	2 (05-07)	2 (DLX ONLY)	4 (UPM3)
				W (02-09)			3 (08-18)		5 (UPMXL)
									1 (CM3-2)

DELUXE PRODUCT CODE EXAMPLE TP3E10NBD23242430

TP3 (Tankpak Series 3) + E (External) + 10 (Number of Heaters) + N (Natural Gas) + B (Back to Back) + D (Deluxe Controller) + 2 (Number of Primary Pumps) + Pump Model Identifier + 2 (Number of Secondary Pumps) + Pump Model Identifier + 2 (Qty of Storage Tanks) + 430 (Storage Volume)

STANDARD PRODUCT CODE EXAMPLE TP3I06LWS12430

TP3 (Tankpak Series 3) + I (Internal) + 06 (Number of Heaters) + L (ULPG) + W (Wall Mount) + S (Standard Controller) + 1 (1x Primary Pump only) + Pump Model Identifier + Qty of Storage Tanks (if >1) + Storage Volume

TECHNICAL DATA

TANKPAK MODEL	INTERNAL EXTERNAL	TPI 07 TPE 07	TPI 08 TPE 08	TPI 09 TPE 09	TPI 10 TPE 10	TPI 12 TPE 12	TPI 14 TPE 14	TPI 16 TPE 16	TPI 18 TPE 18
Thermal Input	MJ/h	1435	1640	1845	2050	2460	2870	3280	3690
Recovery Rate at 50°C rise	L/hr	5760	6580	7405	8225	9875	11520	13165	14810
Mounting options	W/F/B	W/F/B	W/F/B	W/F/B	B	B	B	B	B
Deluxe or Standard					Deluxe				
Storage Tanks		-	-	-	-	-	-	-	-
		1 x A610430	2 x A610430	2 x A610430	2 x A610430	2 x A610430	3 x A610430	3 x A610430	3 x A610430
1st Hour Capacity (A610340)	Litres	-	-	-	-	-	-	-	-
1st Hour Capacity (A610430)		6170	7400	8225	9045	10695	12750	14395	16040
Electrical Supply (240V/50Hz)	Amps	12.4	14.5	15.3	16.1	17.8	19.5	21.1	22.7
Electrical Connection	STD	-							
Electrical Connection	DLX	240V 50Hz single phase hard wired connection							
PHWF & PHWR Pipe Size	mm	50	50	50	50	50	65	65	65
Natural Gas Pipe Size	mm	50	65	65	65	80	80	80	80
Propane Gas Pipe Size		32	40	40	40	40	50	50	50
Weight Empty (F/B) ³	STD kg	-	-	-	-	-	-	-	-
Weight Empty (F/B) ³	DLX	527/476	702/633	766/701	725	907	981	1047	1143

TANKPAK QUICK SIZING GUIDE

Apartments 1 hr peak				Hotel Rooms 1 hr peak	Amenities 30 min peak	Nursing home 2 hr peak	Tankpak Series 3 Model	Recovery @ 50°C Rise (L/hr)	Storage Tank Capacity (L)	First Hour Capacity (L)	Thermal Input (MJ/h)
Studio ⁶	1 & 2 bedroom ⁶	2 bedroom ⁶	2 & 3 bedroom ⁶	1-3 Star ⁷	No. of showers ⁸	No. of beds ⁹					
49	21	16	14	24	32	30	TP02/340	825	410	1235	205
82	35	27	24	41	49	54	TP02/1430	1645	410	2055	410
115	50	38	34	57	65	79	TP03/1430	2470	410	2880	615
148	64	49	44	74	82	103	TP04/1430	3290	410	3700	820
181	78	60	54	90	98	128	TP05/1430	4115	410	4525	1025
213	92	71	64	106	115	152	TP06/1430	4935	410	5348	1230
246	107	82	74	123	131	176	TP07/1430	5760	410	6170	1435
296	128	98	89	148	164	207	TP08/2430	6580	820	7400	1640
329	143	109	99	164	180	231	TP09/2430	7405	820	8225	1845
361	157	120	109	180	197	255	TP10/2430	8225	820	9045	2050
427	186	142	129	213	230	304	TP12/2430	9875	820	10695	2460
510	221	170	154	255	279	359	TP14/3430	11520	1230	12750	2870
575	250	191	174	287	312	408	TP16/3430	13165	1230	14395	3280
641	278	213	194	320	345	457	TP18/3430	14810	1230	16040	3690

¹ 2 Pak does not stage.

² Model dependent.

³ Weight includes CFWH unit, 610430 storage tank/s, 1 x primary pump, frame and preassembled manifolds. Note: Add 48.2kg for CM3-2 & CM5-2 D/S Primary assy, 63.8kg for CM10-1 D/S primary assy, 19.4 kg for UPM3 D/S secondary assy and 22.7 kg for UPMXL D/S secondary assy.

⁴ Tankpak concept models with 1x CFWH are supplied with CFWH, pump & controller supplied loose for installer to fit. The CFWH must be mounted on a vertical wall (W).

⁵ DLX models based on all heaters, 1 x primary pump and 2 x UPMXL operating simultaneously.

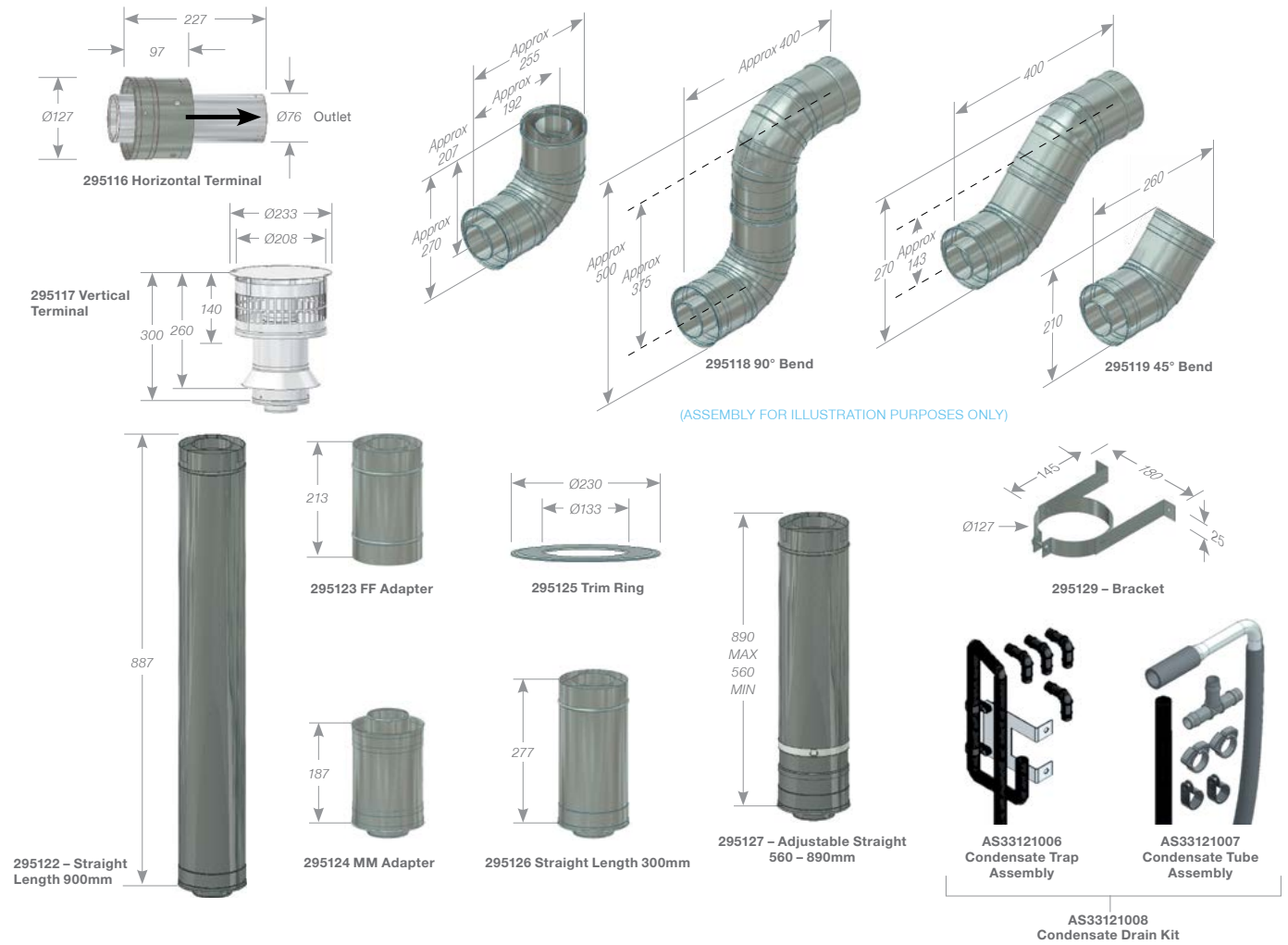
⁶ Allowance - Studio 25L, 1 bedroom 40L, 2 bedroom 75L, 3 bedroom 90L. Calculated on even ratio of apartment mix.

⁷ Allowance - 2 people per room, 25L per person.

⁸ Allowance - 25L per shower.

⁹ Allowance - 37.5L per bed for showering, bed pans, cleaning, 6L per bed for meals, 24L per bed for laundry.

FLUE COMPONENTS



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 or vertically
295117	Vertical Terminal	Required where flue terminates vertically
295118	90° Bend	Maximum of 5 per installation
295119	45° Bend	Maximum of 10 per installation (with no 90° bends)
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
AS33121006	Condensate Trap Assembly	Built-in and supplied on frame
AS33121007	Condensate Tube Assembly	Built-in and supplied on frame
AS33121008	Kit Condensate Drain Single CFWH	1 x kit required for single CFWH. Includes drain and trap

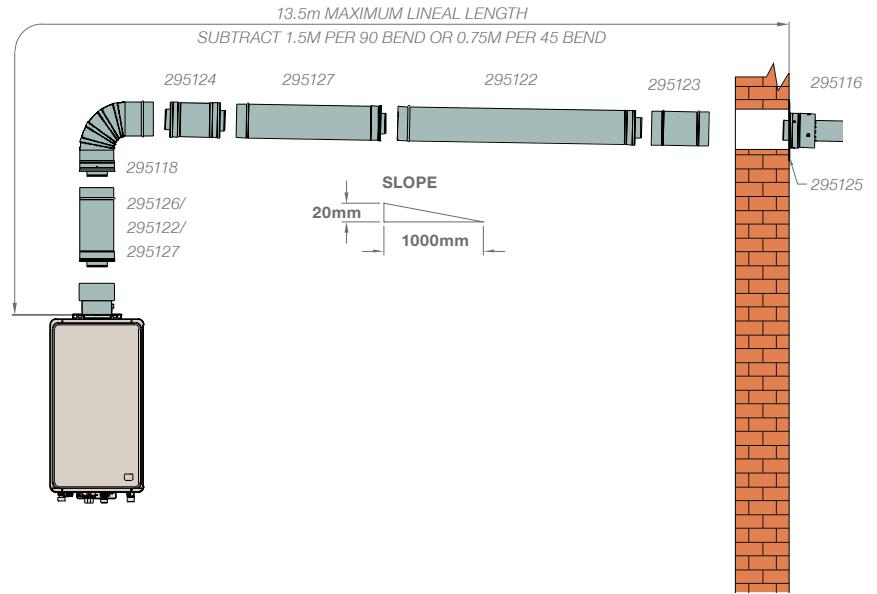
CO-AXIAL FLUE SPECIFICATION	MATERIAL/DIAMETER (mm)
Inner flue	316 or 444SS/75
Outer flue	Aluminised Steel/125

INDOOR INSTALL TIPS

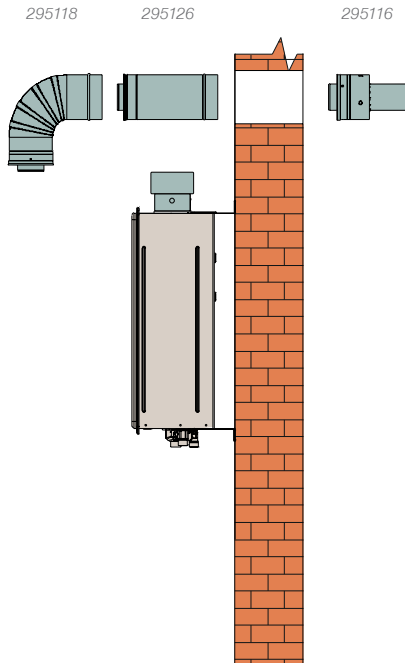
Here's a guide to selecting the flue components you need.

- 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 AS/NZS 5601.1.
- Flashing is required to be installed where a vertical flue section penetrates the roof line (not supplied).
- The condensate drain and trap assembly are built in with the system and supplied on frame. The condensate trap must be filled with water to prevent spillage of products of combustion and the hose drained to the sewer or outside.
- Separate ventilation for combustion is not required as the air for combustion is supplied in the flue outer.
- The flue system is certified to be installed with zero clearances between the water heaters and combustible materials.
- Flue termination must comply with the requirements of AS/NZS 5601.1.
- Flue penetrations through walls and ceilings must be sealed in accordance with local fire regulations.
- The maximum flue length with no bends is 13.5m. Reduce the maximum length by 1.5m for every 90° bend and by 0.75m for every 45° bend.
- The flue system is suitable for vertical and horizontal termination when used with the appropriate terminal.

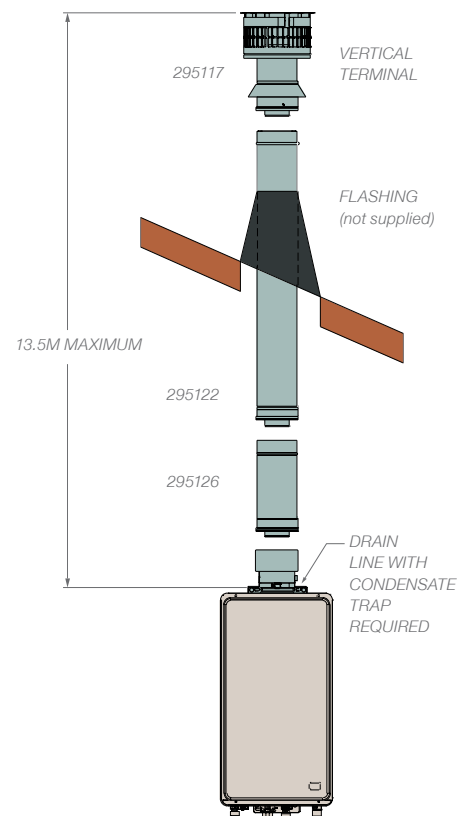
Horizontal terminal adjacent wall



Direct vent horizontal wall



Vertical - single water heater only



Rheem INTERNAL 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.

MULTIPLE WATER HEATER FLUE INSTALLATION

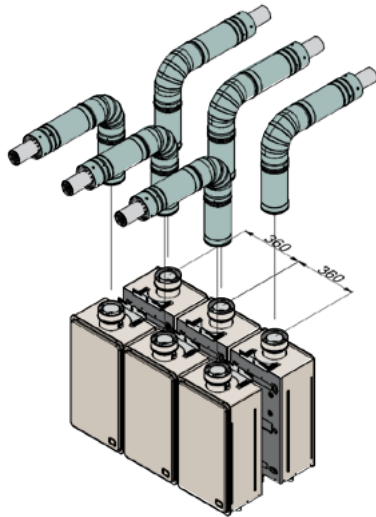
Here's a guide to installing multiple flue components.

- Where multiple water heaters are installed, each water heater must be individually flued to the outside. A common flue system **MUST NOT** be used.
- For a multiple unit installation, the water heater is certified for installation with zero clearance between adjacent water heaters. Observe flue terminal clearances from other objects in accordance with AS/NZS 5601.1.

Note: All flues for multiple water heaters **MUST** terminate horizontally.

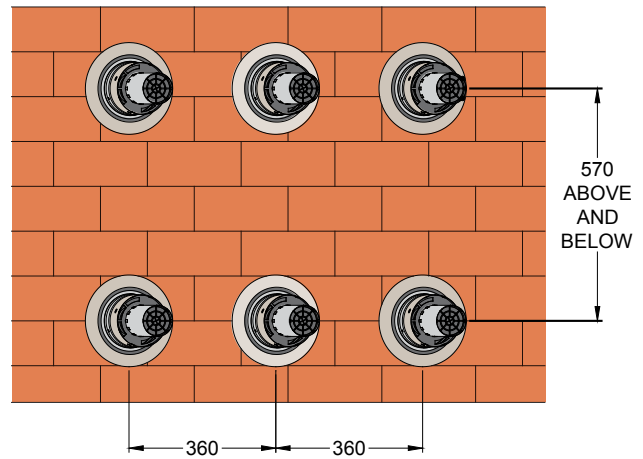
Flueing through the Roof

- The minimum side by side centre to centre distance between flue terminals is to be no less than 360mm.
- Run the flueing through the roof as dictated by plant room requirements.
- Each flue is to be terminated horizontally by using 90° bends (PN 295118) and horizontal flue terminals (PN 295116).
- The flue terminals for back to back water heaters should be installed 180° opposite to each other as shown.



Flueing through the Wall

- The minimum horizontal centre to centre distance between flue terminals is to be no less than 360mm.
- The minimum vertical centre to centre distance between flue terminals is to be no less than 570mm.



Maximum Flue lengths

The certified flue length is 9m with a maximum of 3 x 90° bends. The maximum flue length with one bend can be 12.0m.

Reduce the maximum length by 1.5m for every 90° bend and by 0.75m for every 45° bend. The flue system is suitable for vertical or horizontal termination when used with the appropriate terminal.

Note: It is theoretically possible to have an odd number of 45° bends (for example a horizontal terminal installed on a wall that is 45° to the wall to which the CFWH is mounted) and in this instance the equivalent length of the 45° bend should be added or subtracted as required.

TankPak Series 3° warranty: 5 years on VE cylinder, 8 years on SS cylinder, 1 year on heat exchanger, 1 year on parts & labour. Refer installation instructions for further detail.

NO. OF 90° BENDS	NO. OF 45° BENDS	MAXIMUM FLUE LENGTH (m)
0	-	13.5
1	-	12.0
2	-	10.5
3	-	9.0
4	-	7.5
5	-	6.0
-	1	12.75
-	2	12.0
-	3	11.25
-	4	10.5
-	5	9.75
-	6	9.0
-	7	8.25
-	8	7.5
-	9	6.75
-	10	6.0

Rheem New Zealand Limited

Freephone 0800 657 336

Freefax 0800 657 337

Telephone 09 829 0200

475 Rosebank Road, Avondale 1026

PO Box 19011, Avondale,
Auckland 1746, New Zealand

www.rheem.co.nz

All specifications contained in this brochure are subject to change without notice. Please check the specifications are current at the time of ordering or building to incorporate the appliance. All information is current at the time of publication, (July 2021) but may change without notice.

RHE205 07/21

STEADY, HOT & STRONG

INSTALL A RHEEM®

