

# Meridian Condensing Water Heaters



# Meridian

## Wall Mounted 24 – 100kW

## Floor Standing 120 – 150kW

Meridian Condensing Water Heaters provide very high power outputs and efficiency in compact formats for the ultimate installation flexibility. They are available in both wall hung and floor standing models.

Compact, versatile and highly efficient, Meridian Condensing Water Heaters are packed with features that save on space, installation time and energy. Meridian Condensing Water Heaters work at very high and constant efficiencies reaching up to 108.6% enabling seasonal savings up to 35%.

Features include electronic starting with flame ionization and continuous modulating control from 20% to 100% electronically managed by a new microprocessor on both hydraulic circuits. The “ecological burner” produces a “cool flame” combustion which considerably reduces nitrogen oxide and carbon monoxide emissions.

- Water heater heat exchanger is completely fabricated from stainless steel for a long service life and maximum reliability
- Floor Standing water heaters can be bolted together for cascading
- Self diagnostic electronic system
- Anti-seizing pump system

State of the art features make meridian water heaters versatile and suitable for many different applications.



Gas Safety Certified

Australian Approved  
Type A Gas Appliance



Wall Mounted



Floor Standing

### Product Quick Check

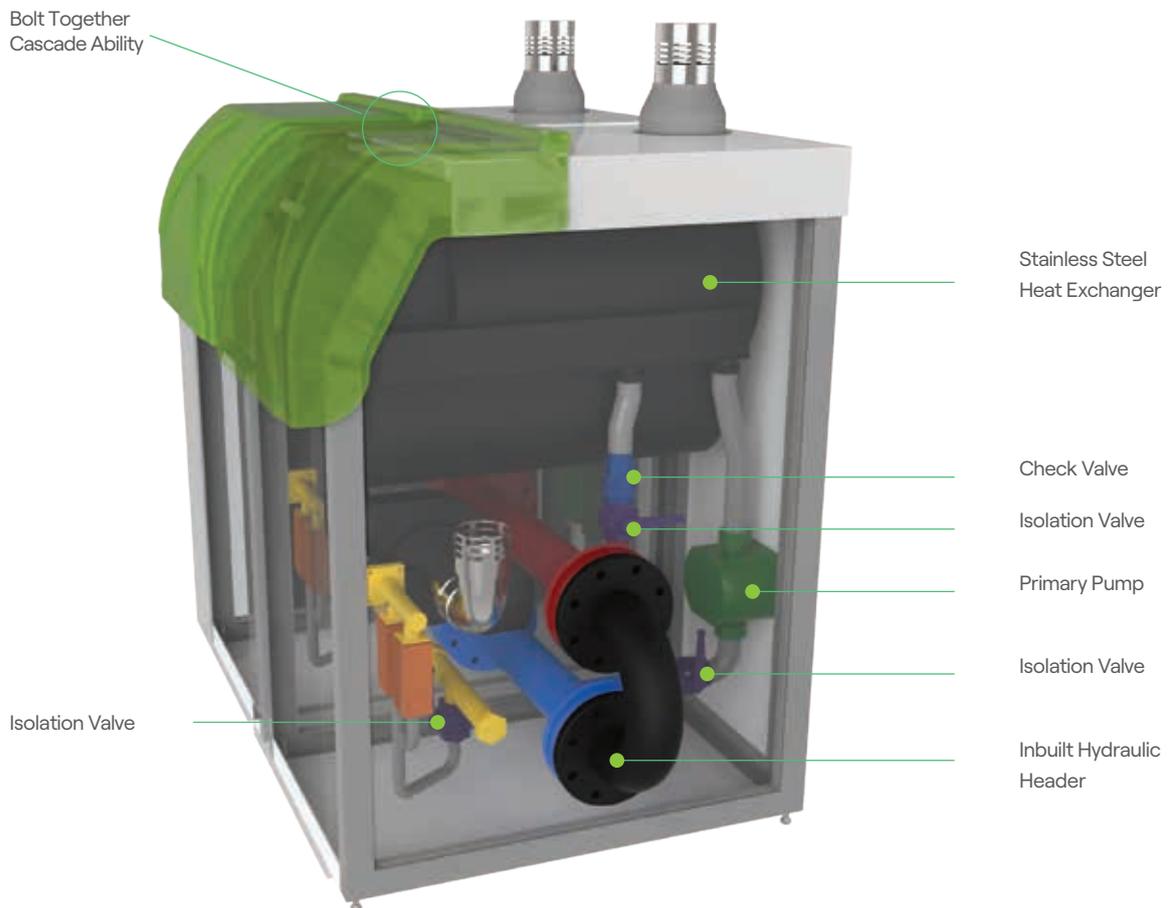
Type	Condensing Forced Draft	Modulation	1:5
Range	24-157kW	Cascadable	Yes
Efficiency	108.6% (Net) 97.8% (Gross)	Max Pressure	300kPa (24-50kW) 500kPa (75-150kW)
Outdoor option	Yes	Low Nox	Yes
Fuel Type	Natural Gas, LPG (selected models)	Building J Code 2019 compliant	Yes
Gas Approval Type	Type A		

## Features

- Australian Approved Type A Appliance means no individual approval inspection is necessary.
- Tower module available, incorporates a secondary pump and expansion tank and is designed to complement the water heating units.
- Stainless steel water heater and heat exchanger provides long service life and maximum reliability.
- Wall hung and floor standing models to suit various installation requirements.
- Low nox emissions providing environmentally friendly heating.

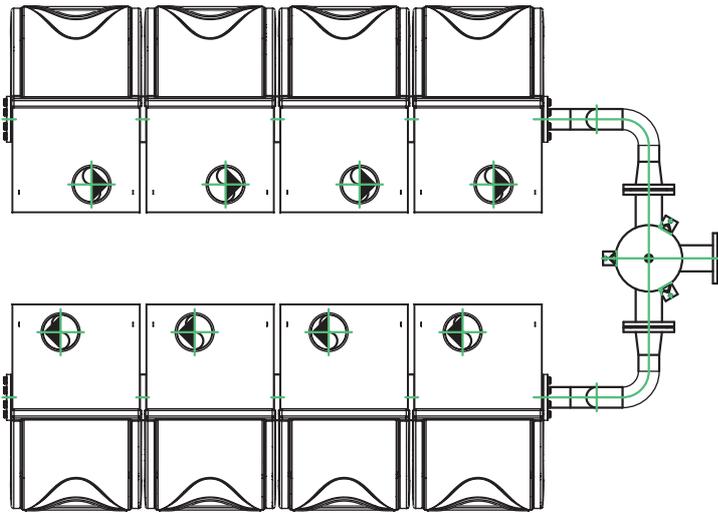
## Advantages

- **Inbuilt pumps & headers** – The Meridian floor standing water heaters reduce install time by up to 30% and eliminates installation errors due to the innovative design of having the primary pumps and flow/returns headers incorporated inside the water heater.
- **Cascadable** – Thanks to the inbuilt headers, Meridian water heaters can be cascaded together saving plant room space and providing sequence control of multiple units with BMS feedback.
- **Isolation valves** – Isolation valves fitted to each water heater allow service or maintenance work to be carried out without disturbing the cascade arrangement.



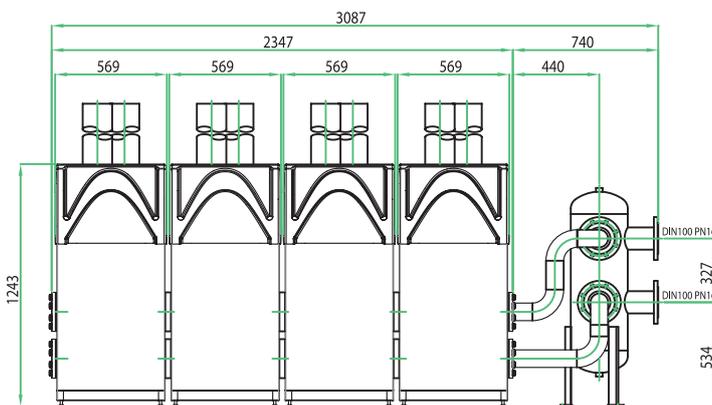
# Installation Examples

Model 120 - 150 (8 x 2 Water heaters) c/w HS2 - 1320F Hydraulic Separator

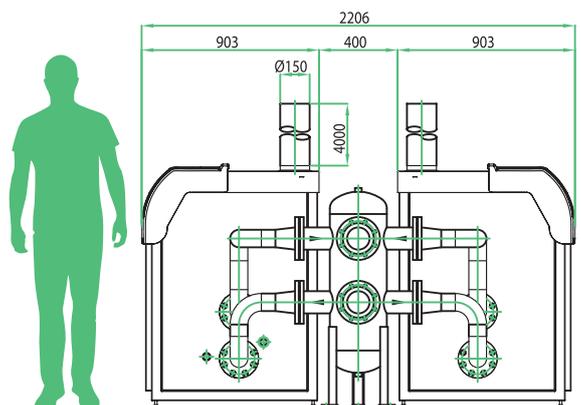


Plan View

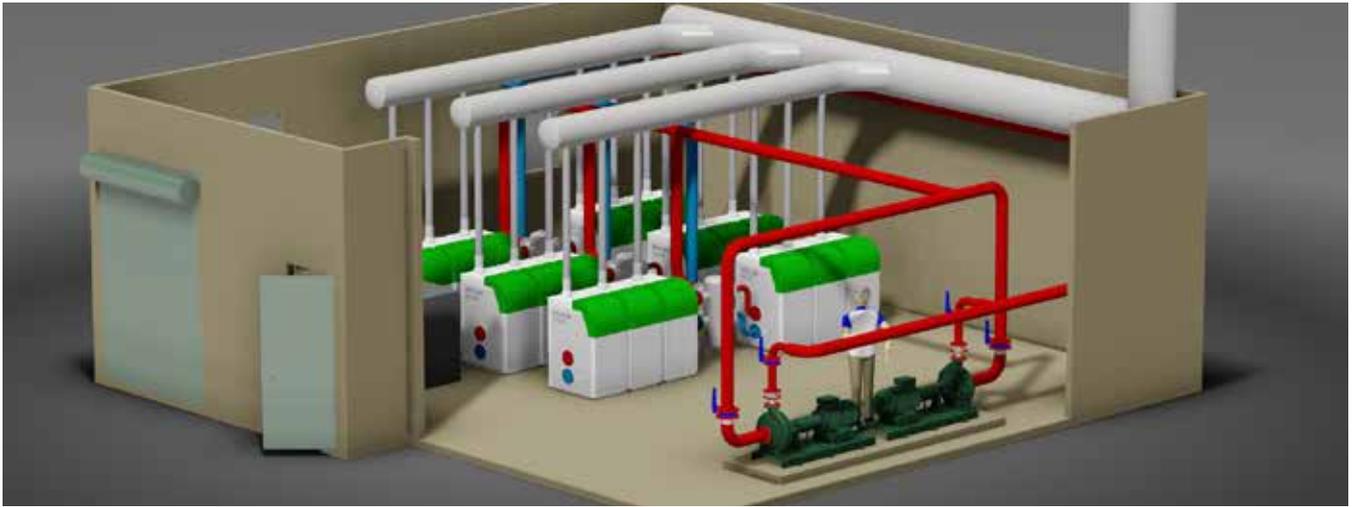
Meridian Water Heaters can be cascaded to suit many project types & sizes offering a vast variety of solutions for your needs.



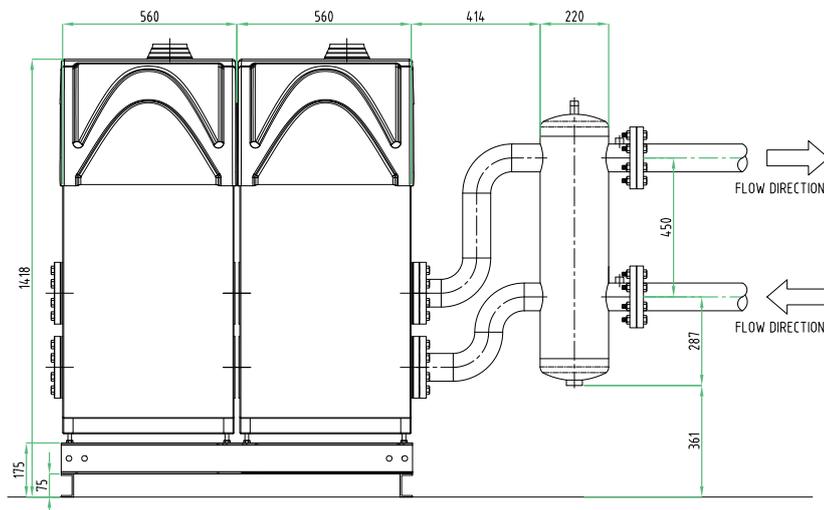
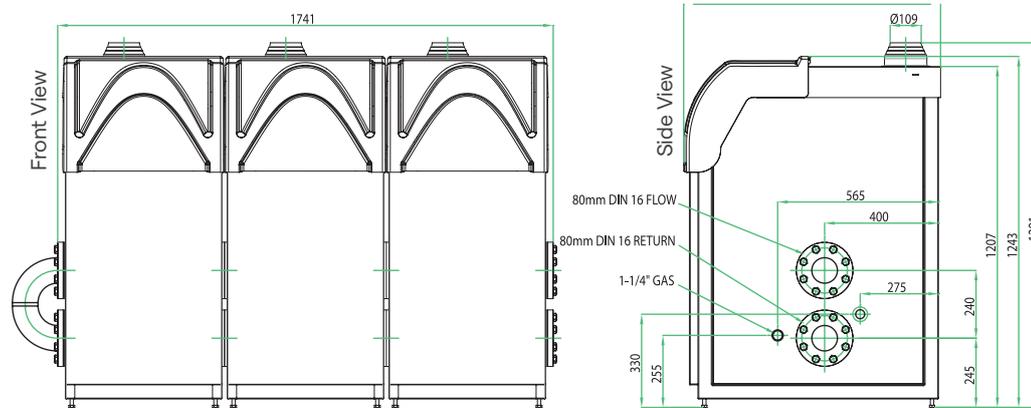
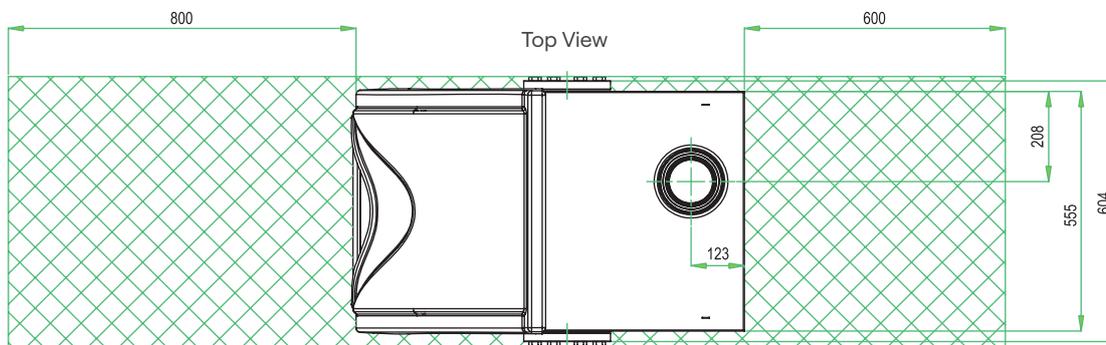
Front View



End View



Clearance Diagram - Meridian Model 120 - 150 x 3 in series setup



### Hydraulic Separator Connection Details

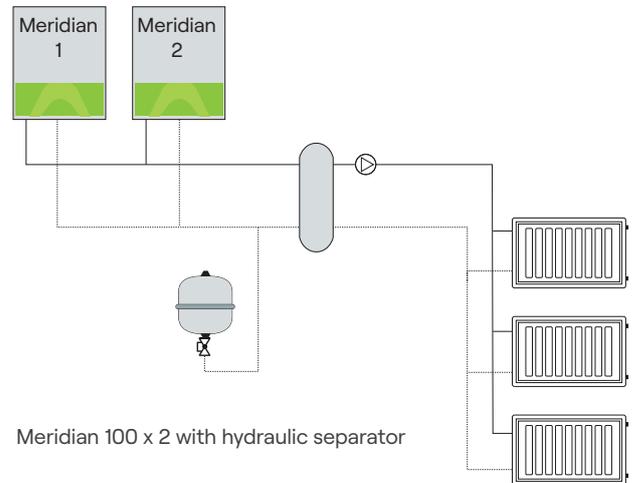
Suction of pump must come from the top of the hydraulic separator and pump to the field.

Water and Gas connections can be either left or right hand side.

# Performance and Dimensional Data

## Meridian Wall-Hung - 24-100kW

- Type A Appliance
- High Efficiency
- Compact Size
- Cascadable
- In Built Variable Speed Pump (24, 32, 50kW only)
- Australian Gas Approval Number: GSCS20215



Meridian 100 x 2 with hydraulic separator

### Overview

#### Gas Pressure Range

1.1 - 2.7 kPa

#### Min Water Pressure

100kPa

#### Max Water Pressure

300kPa (24, 32, 50) - 500kPa (75, 100)

Model	Output 50/30°C kW	Net Efficiency 50/30°C %	Output 80/60°C kW	Net Efficiency 80/60°C %	Nominal Input MJ/hr	Modulation Ratio	Secondary Side Flow Rate min/ max L/s *	Water Pressure Loss kPa	Total Water Volume litres	Dry Weight kg	Dimensions (mm)			Flue Connection size mm**	Air Intake size mm	Power Supply V/A/Hz
											H	W	D			
Indoor - Natural Gas																
M24-I	25.3	106	23.5	98	96	1.8	0.04/0.30	21	3.5	42	850	450	280	Ø60/100	Ø80	240/0.6/50
M32-I	31.8	106	29.4	98	117	1.9	0.04/0.38	20	3.5	42	850	450	280	Ø60/100	Ø80	240/0.6/50
M50-I	50.28	106.3	47.2	98	192	1.5	0.12/0.60	25	5	50	750	400	420	Ø80	Ø64	240/0.6/50
M75-I	75.8	106	67.9	97	280	1.5	0.83/0.91	25	6	65	880	495	500	Ø80	-	240/0.6/50
M100-I	97.1	106	87.6	97.3	360	1.5	1.05/1.16	26	8	75	880	495	500	Ø100	-	240/0.6/50

#### Indoor - LPG

M32LPG-I	31.8	106	29.4	98	120	1.9	0.04/0.38	20	3.5	42	850	450	280	Ø60/100	Ø80	240/0.6/50
M50LPG-I	50.28	106.3	47.2	98	192	1.5	0.12/0.60	25	5	50	750	400	420	Ø80	Ø64	240/0.6/50
M100LPG-I	97.1	106	87.6	97.3	360	1.5	1.05/1.16	26	8	75	880	495	500	Ø100	-	240/0.6/50

#### Outdoor - Natural Gas

M24-O	25.3	106	23.5	98	96	1.8	0.04/0.30	21	3.5	42	1061	450	276	-	-	240/0.6/50
M32-O	31.8	106	29.4	98	117	1.9	0.04/0.38	20	3.5	42	1061	450	306	-	-	240/0.6/50
M50-O	50.28	106.3	47.2	98	192	1.5	0.12/0.60	25	5	50	1061	400	446	-	-	240/0.6/50
M75-O	75.8	106	67.9	97	280	1.5	0.83/0.91	25	6	65	1091	495	526	-	-	240/0.6/50
M100-O	97.1	106	87.6	97.3	360	1.5	1.05/1.16	26	8	75	1091	495	526	-	-	240/0.6/50

#### Outdoor - LPG

M32LPG-O	31.8	106	29.4	98	120	1.9	0.04/0.38	20	3.5	42	1061	450	306	-	-	240/0.6/50
M50LPG-O	50.28	106.3	47.2	98	192	1.5	0.12/0.60	25	5	50	1061	400	446	-	-	240/0.6/50
M100LPG-O	97.1	106	87.6	97.3	360	1.5	1.05/1.16	26	8	75	1091	495	526	-	-	240/0.6/50

\*\* The size of the main flue may vary from the flue connection size subject to various installation criteria. For assistance with sizing your flue, please discuss your project details with our technical support team.



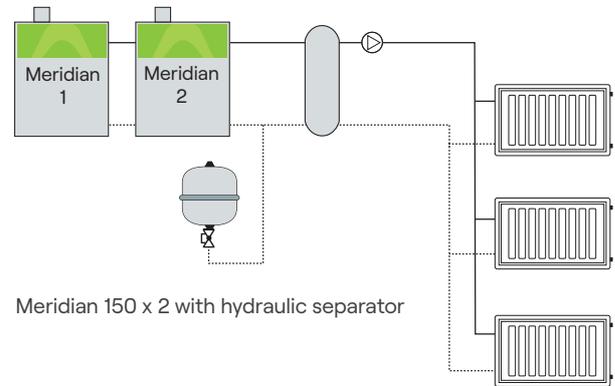
Indoor



Outdoor

## Meridian Floor Standing - 120-157kW

- Type A Appliance
- High Efficiency
- Compact Size
- Cascadable
- In Built Header
- In Built Variable Speed Pump
- Australian Gas Approval Number: GSCS20215, VGC40016 (M120LPG)



Meridian 150 x 2 with hydraulic separator

### Overview

#### Gas Pressure Range

1.1 - 2.7 kPa

#### Min Water Pressure

100kPa

#### Max Water Pressure 500kPa

Model	Output 50/30°C kW	Net Efficiency 50/30°C %	Output 80/60°C kW	Net Efficiency 80/60°C %	Nominal Input MJ/hr	Modulation Ratio	Secondary Side Flow Rate min/max L/s*	Water Pressure Loss kPa	Total Water Volume litres	Dry Weight kg	Dimensions (mm)			Flue Connection size mm**	Air Intake size mm	Power Supply V/A/Hz
											H	W	D			

#### Indoor - Natural Gas

M120-IV	120	108.6	107	97.2	450	1:5	0.29/1.43	17	32	200	1207	550	875	Ø100	-	240/2.1/50
M150-IV	157	108.6	144.1	97.3	592	1:5	0.38/1.88	27	32	200	1207	550	875	Ø100	-	240/2.5/50

#### Indoor - LPG

M120LPG-IV	120	108.6	107	97.2	396	1:5	0.29/1.43	17	32	200	1207	550	875	Ø100	-	240/2.1/50
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#### Outdoor - Natural Gas

M120-OV	120	108.6	107	97.2	450	1:5	0.29/1.43	17	32	200	1243	550	895	Ø100	-	240/2.1/50
M150-OV	157	108.6	144.1	97.3	592	1:5	0.38/1.88	27	32	200	1243	550	895	Ø100	-	240/2.5/50

#### Outdoor - LPG

M120LPG-OV	120	108.6	107	97.2	396	1:5	0.29/1.43	17	32	200	1243	550	895	Ø100	-	240/2.1/50
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All secondary pumps must suck from the top of the hydraulic separator and pump into the field.

\*\* The size of the main flue may vary from the flue connection size subject to various installation criteria. For assistance with sizing your flue, please discuss your project details with our technical support team.



Indoor



Outdoor

# Meridian Tower Floor Standing

## Secondary Header Unit

- Ease & speed of installation
- Compact size
- In-built expansion tank
- In-built header
- In-built secondary pump
- Australian Approved
- Max Water Pressure 300kPa



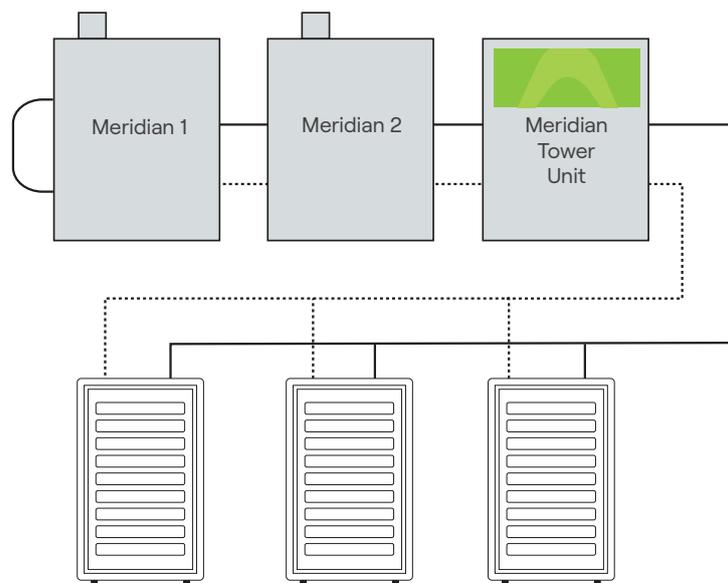
## Performance and Dimensional Data

### Indoor

Model	Max Flow Rate L/s	Max Head kPa	Expansion Tank L	Height mm	Width mm	Depth mm
MT360-I	5.55	265	50	1207	550	895
MT150-I	3	210	50	1207	550	895

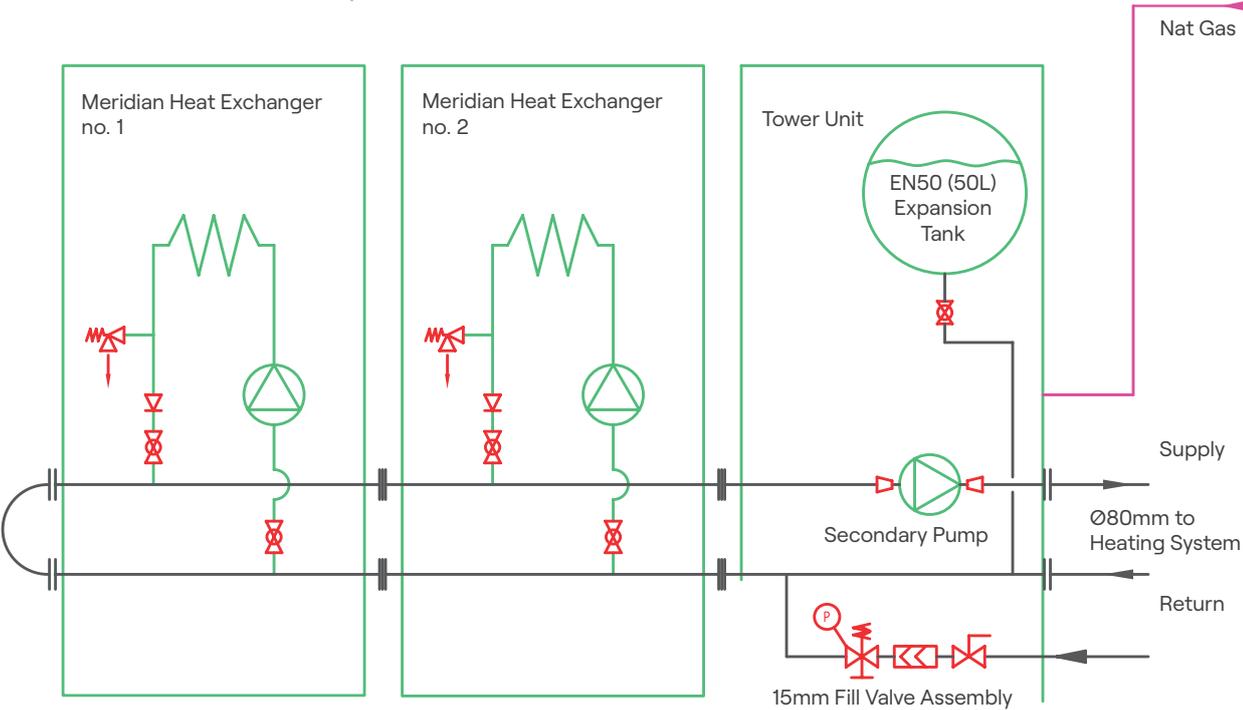
### Outdoor

MT360-O	5.55	265	50	1243	550	895
MT150-O	3	210	50	1243	550	895



Meridian 150 x 2 with Tower Unit

Meridian P&I Tower Setup



Note: Install Dosing Pot across pump

Meridian Prefabricated Base Frames

An example Meridian base frame configuration is illustrated below. These prefabricated supply options offer substantial time and cost savings on site.



## Case Studies



### Macquarie University Macquarie Park, NSW

2 x Meridian 120kW



### Australian Trucking Association Forest, ACT

9 x Meridian 150kW



### Toorak College Mt Eliza, VIC

3 x Meridian 150kW

Prefabricated skid frame system



**St John of God Hospital  
Warrnambool, VIC**

3 x Meridian 100kW



**Softel Melbourne on Collins  
Melbourne, VIC**

5 x Meridian 100kW



**Elite Swimming Pool  
Essendon, VIC**

2 x Meridian 75kW

