



“hot water as  
it should be”



**Molecular heat  
technology**

**Latest technology  
No heat elements**

- No scale
- No burn out
- No thermal inertia



**Centisecond  
technology**

**Full digital control**

- Calculates the power required every 100th second
- Only uses the energy that is needed



**No risk of  
scalding**

**Temperature  
control**

- Up to 50°C no tempering valve required
- Temperature set and forget
- Down to 1.5 LPM



**Can be installed  
at point-of-use**

**Installation**

- No venting required
- Install under a sink or basin, in a cupboard
- IP 44 rated



**Easy  
to install**

**No tank**

- A4 footprint
- 4 screw hole mountings
- Standard BSP fittings

# The Future of Continuous Flow Electric Water Heating

Delivering unequalled temperature control

Single Phase and Three Phase solutions available



**MicrHeat™**

Call us on **1300 981 325** or check us out on [www.microheat.com.au](http://www.microheat.com.au)

## HOT WATER JUST GOT SMARTER

### A new approach to water heating, a new benchmark in performance

MicroHeat invented, designed and developed a method of control for water heating using electrode technology that is completely different to existing heat element technology: the MicroHeat technology removes unnecessary wastage of energy and water, as well as failures caused by scaling, poor temperature control, voltage fluctuations, overheating, inrush current and stress corrosion normally associated with heat element/exchange technology.

The MicroHeat CFEWH Series 1 (Single Phase) & Series 2 (Three Phase) control method intelligently “optimises” the amount of energy needed to heat water. Control is dependent on the rate of flow of water, and the difference between the temperature of the incoming cold water, and the temperature of the hot water required.

The compact A4 footprint (applicable to all Single phase and Three phase models – refer back page for actual size!) is designed to provide an instant and continuous flow of hot water at the point of use, where hot water can be delivered through very short lengths of pipe. In this case, water isn’t wasted, and it’s always delivered at a stable temperature, despite any fluctuations in water pressure.

### MicroHeat CFEWH Series 1-10 and Series 1-20 Single Phase

- The Single Phase CFEWH Series 1 delivers power to heat the water up to a maximum of 9.6 kW.
- When two MicroHeat CFEWH Series 1 units are used in *tandem*, a *single phase* electrical supply can be used to achieve flow rates equivalent to *three phase* powered water heaters
- The MicroHeat CFEWH Series 1 Single Phase is available as Premium and Standard models, both factory set and can be set to a maximum of 50°C, OR other specified maximum setting up to 60.
- When factory temperature setting is limited to  $\leq 50^{\circ}\text{C}$  the installation of a tempering valve or a thermostatic mixing valve is not required\*.
- The CFEWH Series 1 Premium model allows adjustment of the output water temperature between 20°C to 50°C and displays both water temperature setting and flow rate.



CFEWH Series 1-10  
Premium

CFEWH Series 1-10  
Standard



CFEWH Series 1-20  
Tandem

### MicroHeat CFEWH Series 2-15/18/21/24/27/30 Three Phase

- The Three Phase CFEWH Series 2 delivers power to heat the water up to a maximum of 30 kW, flow rates can be delivered between 20 LPM and as low as 1.5 LPM.
- The MicroHeat CFEWH Series 2 Three phase is available in Premium models. Can be factory set to a maximum of 50°C or 65°C, OR other specified maximum setting.
- When factory temperature setting is limited to  $\leq 50^{\circ}\text{C}$  the installation of a tempering valve or a thermostatic mixing valve is not required\*.
- The CFEWH Series 2 Premium model allow adjustment of the output water temperature between 20°C or a maximum of 50°C, 60°C or 65°C and displays both water temperature setting and flow rate.



CFEWH Series 2  
Premium

### MicroHeat CFEWH Series 3-2/3/4 Single phase

- Units up to 20 Amps and versions in 2.4 kW, 3.6 kW and 4.8 kW.
- Hard wired or plug and cord options.
- All the benefits and features of the Series 1, except half the power and size.
- Currently under development, release to market planned 2019.



CFEWH Series 3

\*Compliance with AS/NZS 3500 in relation to temperature stability certifies that the appliance ensures temperatures of 50°C are not exceeded. Water temperatures greater than 50°C can cause scalding. Care should be taken with children and people with limited sensory, physical, and/or mental capability. There is no requirement under AS/NZS 3500 to fit a temperature limiting device if this water heater is installed in any location other than in an early childhood centre, school, nursing home or a facility for young, aged, sick or disabled people, as specified in AS/NZS 3500 Section 1.9.

Technical Specifications	SINGLE PHASE			THREE PHASE
	CFEWH SERIES 3 – 2 / 3 / 4	CFEWH SERIES 1-10	TANDEM CFEWH SERIES 1-20	CFEWH SERIES 2-15 / 18 / 21 / 24 / 27 / 30
<b>Electrical Connection – In accordance with AS/NZ 3000 electrical regulations</b>				
Power supply	L/N/G or L/L/G	L/N/G	L/N/G	L/L/L/G
Rated Power (kW) options	2.4, 3.6, 4.8 kW	Up to 9.6 kW	Up to 19.2 kW	15, 18, 21, 24, 27, 30 kW
Voltage (VAC)	240 V	240 V	240 V	415 V
Rated AMPS	10, 15, 20 (Cord or hard wired)	40 A (Hard wired circuit)	80 A (2 x 40A Hard Wired)	20, 25, 29, 33, 38, 42 A (Hard wired circuits)
Frequency (Hz)	50 / 60	50 / 60	50 / 60	50 / 60
<b>Unit Parameters</b>				
Switch on Flow Rate	0.8 LPM	1.5 LPM	1.5 LPM	1.5 LPM
Flow rate @ 15°C temp. shift	2.3/3.4/4.6 LPM	9 LPM	18 LPM	14/17/20/23/26/28 LPM
Maximum temp. settable up to	50°C or 60°C	50°C or 60°C	50°C or 60°C	50°C or 65°C
System Type	Continuous Flow Electric Water Heater(CFEWH)– Electric Instantaneous			
Max. Operating Line Pressure	8 bar / 0.8 MPa	10 bar / 1.0 MPa		
Min. Operating Line Pressure	1.5 bar / 0.15 MPa			
Dimensions	H 315mm x W 132mm x 80mm	H 315mm x W 210mm x D 120mm		H 315mm x W 210mm x D 170mm
Heating Method	Optimised Direct Energy Transfer – Full Digital controlled water heating			
Nominal capacity ml	200 ml	382 ml	2 x 382 ml	382 ml
<b>Standards</b>				
Water Regulation	Due 2020	WaterMark Licence WM-022136, AS/NZS 4020, AS/NZS 3500*		
Electrical Safety	Due 2020	AS/NZS 60335.2.35 / IEC 60335.2.35 / UL499		
EMC	Due 2020	CE/C-Tick		

\* In accordance with AS 3500 Section 1.9.2 and Section 1.9.3. No tempering or thermostatic mixing valves are required for personal hygiene sanitary fixtures other than stipulated in Section 1.9.2 (a).

### CFEWH SERIES Hot Water Output Temperatures/Flow Rate Tables

The incoming water temperature will vary during Summer and Winter. The following tables show the potential maximum hot water flow rates at various inbound water temperatures, for each of the Models available.

#### OUTPUT WATER TEMPERATURE 38°C

#### OUTPUT WATER TEMPERATURE 50°C

Incoming water temp.	Litres per minute with incoming water temp.		Incoming water temp.	Litres per minute with incoming water temp.					
	Series 1-10 240 V 9.6 kW	Series 1-20 240 V 19.2 kW		Series 1 10 240 V 9.6 kW	Series 1 20 240 V 19.2 kW	Series 2 18 415 V 18 kW	Series 2 21 415 V 21 kW	Series 2 24 415 V 24 kW	Series 2 30 415 V 30 kW
10°C	4.9	9.8	10°C	3.4	6.8	6.4	7.5	8.6	10.7
15°C	6.0	12.0	15°C	3.9	7.8	7.4	8.6	9.8	12.3
20°C	7.6	15.2	20°C	4.6	9.2	8.6	10	11.5	14.3
25°C	10.6	21.0	25°C	5.5	11	10.3	12	13.8	17.2
30°C	17.2	21.0	30°C	6.9	13.8	12.9	15	17.2	21.0

## HOT WATER AS IT SHOULD BE

No wait, no waste, no overheat, use only the energy you need to use

Supply the right temperature hot water to your

- Shower – Single or Multiple
- Hand basin – Single or Multiple
- Wash station – Single or Multiple
- Hair salon – Single or Multiple
- Kitchenettes / Laundrettes – Single or Multiple
- Bathrooms – Single or Multiple
- Apartments
- Bidet / safe hygiene washing
- Public / office toilets
- Boost existing hot water supplies

Single or multiple installations will depend on ambient water conditions, flow rate expectations and expected outlet usage rates.

Installations across

- Homes / apartments / Low rise / High rise / Offices / Shopping centres / Aged care\* / Hospitals\* / Schools\* / Cafes / Shops / Infrastructure / government



Mounting points – Top x 2

# MicroHeat™

**HOT WATER AS IT SHOULD BE**

For further information on the CFEWH Series 1, CFEWH Series 1 Tandem and CFEWH Series 2 including warranty terms and conditions, please refer to the CFEWH Installation Manuals, downloadable from our website:

[www.microheat.com.au](http://www.microheat.com.au)

Series 2 - Depth

**Actual CFEWH size**

Series 1 - Depth

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Mounting points – Bottom x 2