

# Why Consider An Air-Sourced Hot Water Heat Pump System?

An air-sourced heat pump absorbs heat from the air and transfers it to heat water. It runs on electricity but is roughly three times more efficient than a conventional electric water heater. It is designed to save energy, save money and reduce greenhouse gas emissions.

## Why Purchase A Sanden Eco™ Hot Water Heat Pump System?

The superior design of Sanden Eco™ Hot Water Heat Pumps ensures:

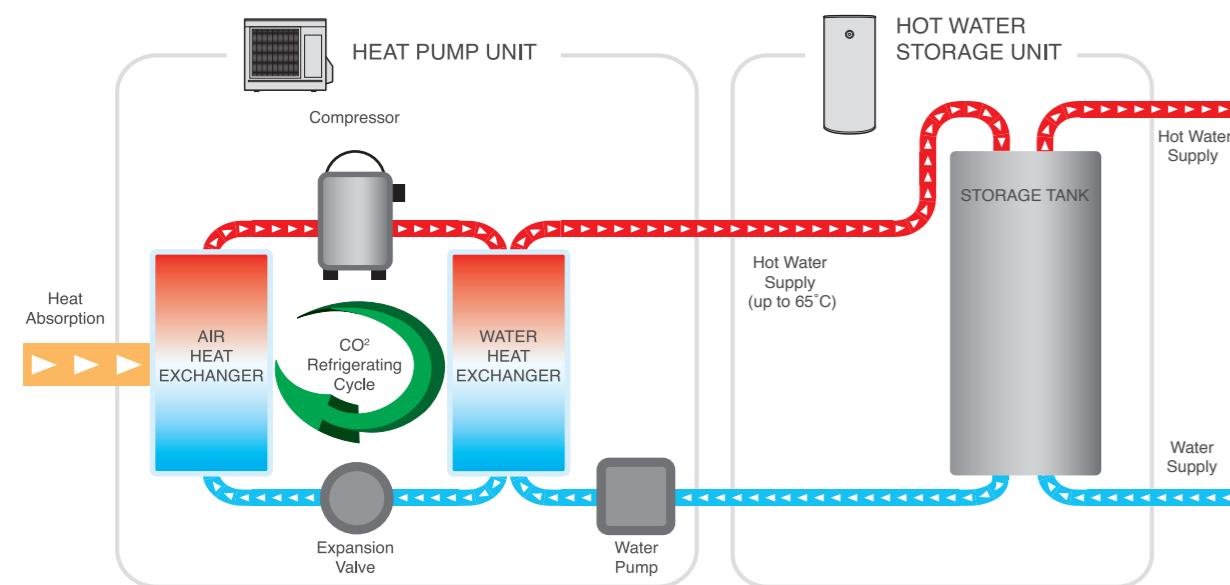
- industry leading energy efficiency using only 22% of the energy required by an electric storage hot water system
- innovative technology - up to 50% faster heat recovery than currently available Hot Water Heat Pumps.
- Perfect to use with Off peak Electricity for even more savings
- The most STC rewards for energy efficiency, means you enjoy a greater discount on the purchase price
- Class leading warranties, backed by Sanden's 30 years of operation in Australia.
- Split system for ease of installation and near silent operation

## How a Sanden System Works

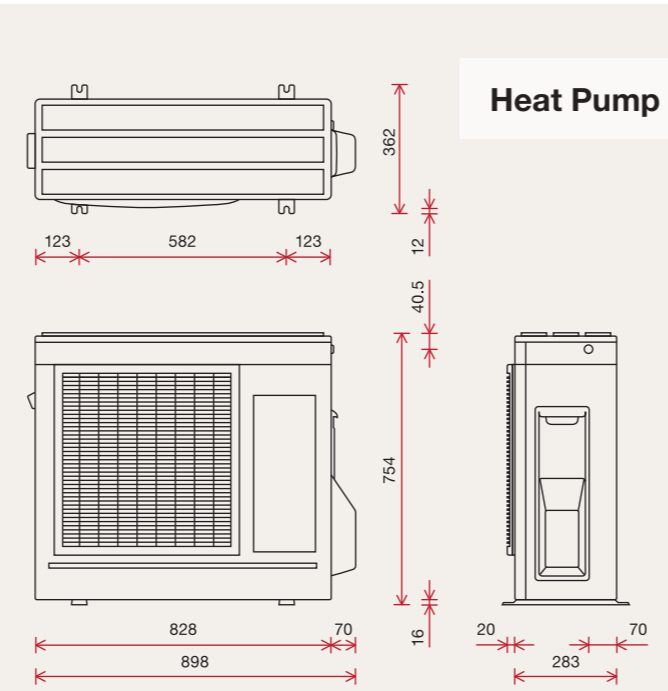
A heat pump is a device that uses a small amount of energy to move heat from one location to another.

It contains a fan that forces air through an evaporator that contains a refrigerant. The heat in the air passes through the evaporator and is absorbed by a natural refrigerant, CO<sup>2</sup> (R744), which is ozone friendly and does not contribute to global warming.

The warm gaseous refrigerant is circulated in the system via a compressor. As it passes through the compressor, its pressure rises, as does its temperature. This hot refrigerant then passes through a heat exchanger to heat the water, which is finally pumped to the storage tank.



## Specifications



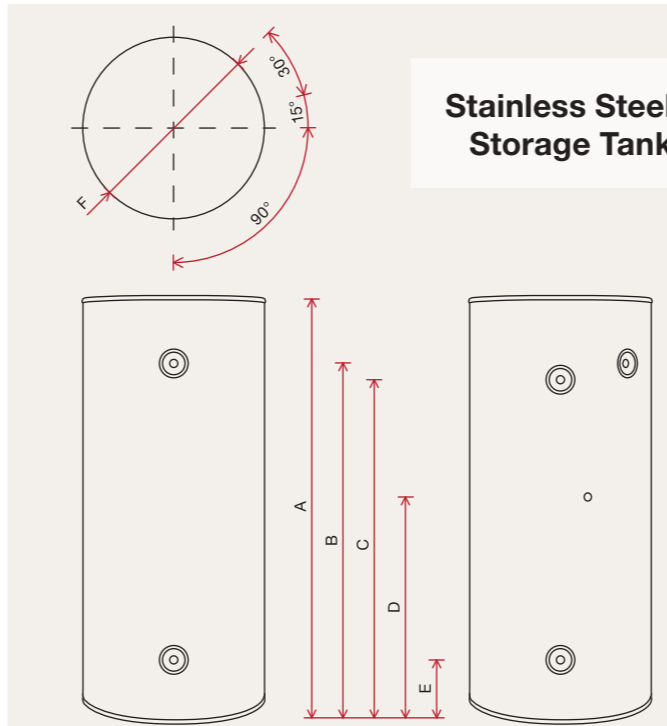
All dimensions displayed in millimeters

| Dimensions                        |                        |
|-----------------------------------|------------------------|
| Weight                            | 56kg                   |
| Technical                         |                        |
| Power Input                       | 1.0kW                  |
| COP (Heating Efficiency)          | 4.5 ^                  |
| Refrigerant                       | CO <sup>2</sup> (R744) |
| Water Temperature Setting         | 65°C                   |
| Compressor                        | Variable               |
| Electrical Supply                 | 220 – 240V/50Hz/1Ph    |
| Circuit                           | 15 Amps                |
| Operating Noise Level             | 38dB                   |
| Ambient Air Operating Temperature | -10°C to +43°C         |
| Water Connections & Settings      |                        |
| Inlet                             | ½" BSP, 12.7mm         |
| Outlet                            | ½" BSP, 12.7mm         |

Note: Materials and specifications are subject to change without notice.



Sanden Dealer:



| Model No:                           | GAUS-315EQTD | GAUS-315EQTE |
|-------------------------------------|--------------|--------------|
| A Height                            | 1540mm       | 2135mm       |
| B Hot Water Outlet & PTR Valve      | 1310mm       | 1780mm       |
| C Heat Pump Return                  | 1250mm       | 1720mm       |
| D Sensor Port                       | 970mm        | 1365mm       |
| E Cold Water Inlet / Heat Pump Flow | 175mm        | 310mm        |
| F Diameter                          | 690mm        | 600mm        |
| Weight                              | 80kg approx. | 68kg approx. |
| Storage Capacity                    | 315L         | 315L         |

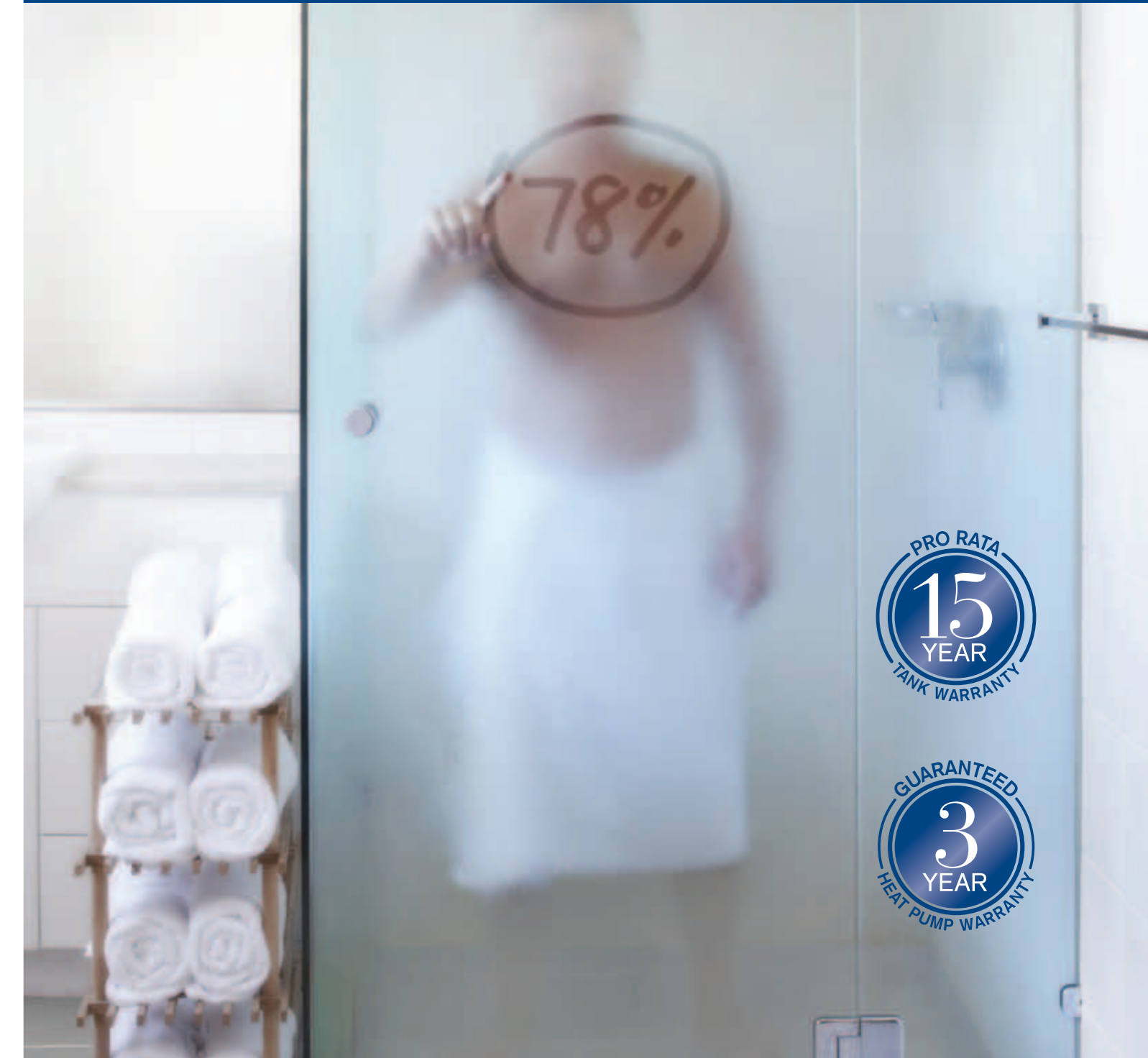
| Water Connections & Settings    |               |
|---------------------------------|---------------|
| Tank Relief Valve Setting       | 850kPa        |
| Expansion Control Valve Setting | 700kPa        |
| Maximum Mains Pressure Settings |               |
| With ECV                        | 500kPa        |
| Inlet Water Operating Pressure  | 200 – 1200kPa |
| Adjustable Tempering Valve      | 1400kPa max.  |

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 Email: sales@sanden.com.au  
 Website: www.sanden-hot-water.com.au

\* Calculated using ORER methodology  
 ^ Tested under AS/NZS125 requirements  
 # It takes just 4 hours to heat 315L of water, from 17°C to 65°C, in ambient air of 20°C.



Save up to 78%\* of your electric hot water energy costs year after year.



**SANDEN.** The leaders in hot water technology

For more information or your nearest installer, please call (02) 9791 0999 or visit [www.sanden-hot-water.com.au](http://www.sanden-hot-water.com.au)



# Enjoy the higher STC rewards even before you turn a hot water tap on.

The Sanden system is the most energy efficient hot water heat pump currently available on the market. As such, when you buy a Sanden system, you receive the highest amount of Small-scale Technology Certificates (STCs) of any currently available hot water heat pump system. These STCs can be used to discount your purchase price. For more information, ask your local Sanden Dealer or visit [www.climatechange.gov.au](http://www.climatechange.gov.au) or [www.recregistry.gov.au](http://www.recregistry.gov.au)

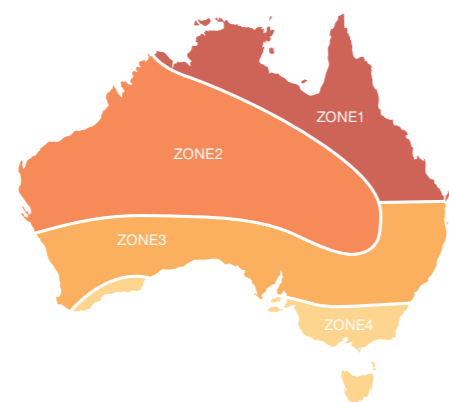


## STC Rebate Zones

A Small-scale Technology Certificate (STC) is the equivalent of one megawatt hour of renewable energy generation. The Sanden Eco™ Hot Water Heat Pump System attracts the STCs below, which can be traded for a cash rebate. Eligible households can also claim State rebates.

| Model         | STC Zone |    |    |    |
|---------------|----------|----|----|----|
|               | 1        | 2  | 3  | 4  |
| GAUS-315EQTD* | 26       | 25 | 31 | 34 |
| GAUS-315EQTE* | 26       | 25 | 31 | 34 |

\* Refer to back page for technical specifications | Notes: This table details the number of STCs registered by the Office of the Renewable Energy Regulator (ORER) for the Sanden Eco™ Hot Water Heat Pump System. STC values are subject to change without notice and are correct at time of printing. STC calculations are based on extended off-peak.



## Sanden. Striving to develop 'Environmentally Advanced' Products

Sanden is a Japanese owned global business, which has earned a solid reputation as a leader in the field of heating and cooling technology. Our focus is to improve the living standards of all Australians, via the development of environmentally advanced products.



**Established:** July 30, 1943  
**Paid Up Capital:** AUD 138.0 million (Fiscal 2010)\* AUD1 = JPY80  
**Sanden Companies:** 30 (In Japan), 53 (Overseas)  
**Number of Employees:** 9884 (Consolidated), 2435 (Non-consolidated)  
**Net Sales:** AUD 2,679.0 million (Fiscal 2010)\* AUD1 = JPY80

Audi, Rolls Royce, Peugeot, Citroen, Renault, Landrover, Fiat, Mercedes Benz & Kenworth.

### 2. Commercial Refrigeration & Vending Machines

Sanden's extensive range of innovative and environmentally sustainable refrigerator/freezer showcases and "energy & labour saving" vending machines is used in convenience stores, restaurants, cafes and supermarkets and preferred by world leading brands, including 7Eleven, Coca Cola, Pepsi and Schweppes.

### 3. Household Living & Environment Systems

Sanden has applied its advanced understanding of heat transfer technologies to the home environment, resulting in the development of the highly innovative and superior Sanden Eco™ Hot Water Heat Pump system, which is manufactured in-house at Sanden's "state of the art" factory in Japan.

### Sanden has 3 core businesses:

#### 1. Automotive Air Conditioning Systems

Sanden has more than 50 years experience in the production and global supply of air conditioning compressors. It currently supplies some of the world's leading automotive brands, including VW, Honda, Ford,

## Superior Features and Benefits

Unlike other hot water heat pump systems, the Sanden system uses a smarter split system where the heat pump unit and stainless steel tank are installed separately. This allows easy on-site handling and installation, as well as flexibility of the storage tank location, which can be up to 4 metres distance from the heat pump unit. The system is suitable for a family of 3-6 people.

### Heat Pump Unit

- A high Coefficient of Performance (COP=4.5^A) results in significantly reduced energy use and CO<sup>2</sup> emissions
- Up to 50% faster heat recovery than typical heat pumps. In ambient air of 20°C it takes approx 4 hours to heat 315 L of water from 17°C to 65°C
- Uses unique Ozone friendly CO<sup>2</sup> (R744) refrigerant
- Simple installation by Plumber & Electrician, with no Refrigeration Mechanic required
- An automatic heating cycle, which makes it perfect for use with off-peak power
- Fitted with in-built freeze protection, making it suitable for all climates (ie. -10°C to +43°C operating range)
- No backup element required
- Whisper quiet operation, with industry leading noise level of 38dB - very neighbour friendly!
- High quality, weather resistant construction for outdoor location
- 3 year Warranty

### Stainless Steel Tank

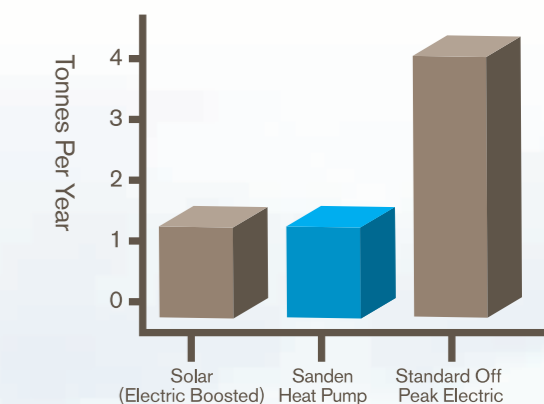
- High quality, Australian made extra long life stainless steel cylinder
- Fully insulated for minimal heat loss
- Mains pressure rated
- 315 litre Tank with two installation options (tall with a reduced diameter or short with an increased diameter)
- Safety pressure and temperature relief valve
- Supplied with all plumbing fittings required to complete the installation
- 15 year Warranty



## How Sanden delivers better performance and savings

Sanden employs superior CO<sup>2</sup> (R744) refrigerant technology, so that the amount of electrical energy required to heat the water is significantly less than that required by a conventional electric storage hot water system. In fact, the Sanden Eco™ Hot Water Heat Pump System consumes 1kW of electricity to generate 4.5kW of heat (COP=4.5^A), which equates to 22% of the energy used by a conventional electric storage system. Consequently, with the Sanden Eco™ Hot Water Heat Pump System, you can save up to 78% of your conventional electric storage hot water energy costs!

Greenhouse CO<sup>2</sup> Emissions from Hot Water Systems



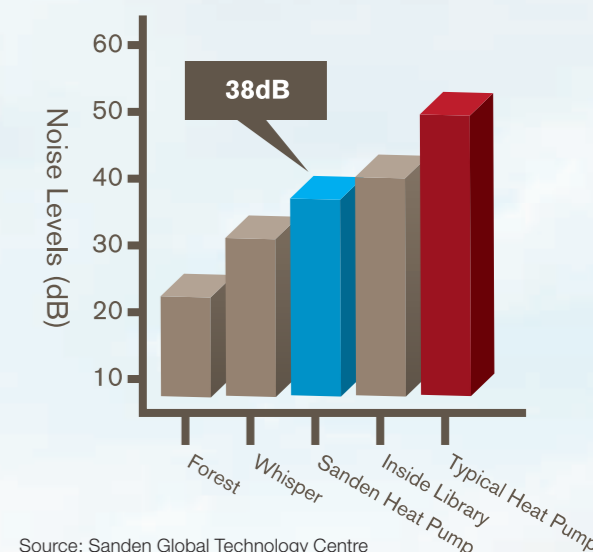
Source: Department of Environment & Climate Change NSW

## Whisper quiet hot water

When purchasing a hot water heat pump, noise levels are an important consideration.

Sanden's extensive research has delivered a 'whisper quiet' operating noise level (38dB) that ensures both you and your neighbours' lifestyles remain unaffected by its operation.

Noise Levels



Source: Sanden Global Technology Centre

## Years of worry free hot water – we guarantee it.

Every Sanden Eco™ Hot Water Heat Pump System is fully backed by our extended warranties. Sanden Eco™ Hot Water Heat Pump units feature a 3 year warranty, while the stainless steel storage tank has a class leading 15 year warranty, providing you with peace of mind when installing your Sanden Eco™ Hot Water Heat Pump System.

For full warranty conditions, please refer to [www.sanden-hot-water.com.au](http://www.sanden-hot-water.com.au)

The Sanden warranty applies alongside, and in addition to, any rights or remedies to which you may be entitled under the Australian Consumer Law.

