



# Toyesi

Energy Efficient Commercial Heat Pumps and Chillers



## Trident

Farm Fresh Heat Pumps & Chillers  
Aquaculture, Horticulture & Aquaponics



Mini Sea Water Heater Chillers.  
For Compact & Small Aquatic Projects

## Trident Farm Fresh Range

For Aquaculture, Horticulture and Farming needs



# Small Aquaculture Projects

## Heater – Chillers – Temperature Control

### Simple Compact Design

Looking across the aquatic industry we noticed that on the smaller end of the picture there was a significant need for small compact systems for water temperature control. There are small aquatic heaters, and small aquatic chillers. But we saw that there was no systems that could handle both heating and chilling in a simple compact design. Designed for projects ranging from 1000 to 5000 litres of water.

The Toyesi Mini Heater Chiller system may suit:

- Aquariums
- Aquaculture
- Research labs
- Space restricted projects

### Mini Heater Chillers Nominal Technical Data

| Model      | Cooling kW | Heating kW | HP  | Litres of Water | Phase (1 or 3) |
|------------|------------|------------|-----|-----------------|----------------|
| TAC - W25  | 2.5        | 2.7        | 1.0 | 1000            | 1 Phase        |
| TAC - W35  | 3.5        | 4.0        | 1.5 | 1500            | 1 Phase        |
| TAC - W50  | 5.0        | 5.4        | 2.0 | 2000            | 1 Phase        |
| TAC - W72  | 7.2        | 8.1        | 3.0 | 3000            | 1 Phase        |
| TAC - W120 | 12.5       | 13.5       | 5.0 | 5000            | 3 Phase        |





# Mini Aquaculture Heater - Chillers

## A Quick Technical Guide

| Model                                   |                          | TAC - W25                      | TAC - W35   | TAC - W50   | TAC - W72   | TAC - W120    |
|---|--------------------------|--------------------------------|-------------|-------------|-------------|---------------|
| Power Source                            |                          | 220V~230V/50HZ                 |             |             |             | 380V/50HZ     |
| Nominal Cooling Capacity (W)            |                          | 2500                           | 3500        | 5000        | 7200        | 12500         |
| Nominal Heating Capacity (W)            |                          | 2700                           | 4050        | 5400        | 8100        | 13500         |
| Nominal Power Of Compressor (HP)        |                          | 1.0                            | 1.5         | 2.0         | 3.0         | 5.0           |
| Rated Power Of Fan (W)                  |                          | 36*2                           | 86*2        | 86*2        | 110*2       | 180*2         |
| Refrigerant                             |                          | R407C                          |             |             |             |               |
| Refrigerant Injection Rate (g)          |                          | 1000                           | 1100        | 1300        | 1680        | 2950          |
| Evaporator                              |                          | PVC Shell ; Pure Titanium Tube |             |             |             |               |
| Diameter Of Water Inlet / Outlet (Inch) |                          | 1"                             |             | 1 1/2"      |             |               |
| Usable Range                            | Ambient Temp (°C)        | -20~50                         |             |             |             |               |
|   | Chiller Water Temp (°C)  | -5~35                          |             |             |             |               |
|   | Max Water Pressure (Mpa) | 5~35                           |             |             |             |               |
| The Factory Defaults Of Thermostat      |                          | Temp 20°C ; Difference 3°C     |             |             |             |               |
| External Dimensions : L*W*H (MM)        |                          | 740*420*585                    | 740*420*585 | 740*420*585 | 830*450*740 | 1100*1100*650 |
| Net Weight (KG)                         |                          | 56                             | 62          | 66          | 72          | 150           |

Note:

1.0HP Chiller suitable for around 1.0 tons of water, 1.5HP Chiller suitable for around 1.5 tons of water ,  
 2.0HP Chiller suitable for around 2.0 tons of water, 3.0HP Chiller suitable for around 3.0 tons of water ,  
 5.0HP Chiller suitable for around 5.0 tons of water





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## The Toyesi Difference



### Proudly an Australian company since it's creation in 1989.

- Australian Manufactured Heat Pumps
- 30+ Years of industry experience
- Immense Tacit Knowledge
- Designed, Manufacture, Tested & Supported Right Here in Australia
- Local supplier, Local Support, Local Knowledge



### Eco-Friendly Energy Efficient Design

- Industry leader in efficient heat pumps since 1989
- Typical COPs of 5 to 10 or more achievable, pending set up
- Up to 1000% more efficient than other heating technologies
- Water Balance Kits & COP Gauges as standard for tweaking performance
- R407C Refrigerant Used



### Unmatched Design Flexibility

- Because we manufacture our own equipment, we have this unmatched flexibility.
- Customisable Chassis – Low-line, Slim-line, stackable, 304 or 316 Stainless Steel & Coatings.
- Heat Exchanger Options – Copper-Nickle & Titanium options
- Standard outdoor designs, Dedicated In-plant systems
- Sound Attenuation, Ducting and more.
- New Transthermal Technology offering amazing multi-function heat pumps.



### True Green Solution

- Energy Efficient
- Long life-cycle design
- Serviceable for life
- Minimum plastics used
- Design to be as close to 100% recyclable as possible.
- Being an Australian Manufacture means we build to Australian standards.
- Multi-function Transthermal Technology unique to Toyesi

We've been making efficient commercial heat pump and chiller projects easy since 1989



## The Specialists in Water Heating and Chilling

Trident – is a division of Toyesi.



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