







# **Ecotel**<sup>™</sup>

5 - 19kW

- + Self-contained outdoor cabin cooler
- + Low noise emissions
- + Emergency 48v DC cooling option

























## Outdoor cabin cooler

### Compact, versatile, resilient

The Ecotel™ is a self-contained, outdoor cabin cooler which has been specifically developed to cool outdoor cabins, shelters, computer rooms, re-locatable equipment buildings and telecom base stations.

Designed for where floor space is limited or unavailable, the Ecotel<sup>™</sup> is quick and easy to install, utilising a secure 'clip-on' mounting system. Five model sizes are available as part of the Ecotel<sup>™</sup> range, 5kW, 8kW, 11kW, 15kW and 19kW.

The unit utilises single or dual systems to provide one, two or three stages of cooling (dependent on unit selection) in addition to its standard free-cooling capabilities. Large surface area coils are ideally positioned to optimise airflow and heat transfer.

#### **Modular Option**

The free-cooling fan and filter box section can be fitted for low ambient locations with the option to retrofit the DX compressor/condenser section (if required) at a later date, e.g. REB moved to hotter climate.



### **Benefits**

- 100% free-cooling only mode for up to 67% of the year (UK)
- Up to 70% energy saving with free-cooling mode
- Single or dual system offer up to three stages of cooling



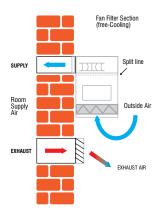
### **Key Features**

- Five models (5 19kW)
- Emergency 48V DC cooling option
- Secure, tamper-proof fixings
- Extra quiet operating mode option
- Upflow configuration
- Backward curved centrifugal fans
- Hermetic scroll compressors
- Large surface area coils

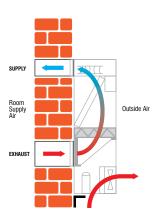
## **Unit Operation**

#### **Dual Fan Box**

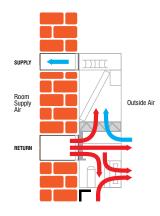
#### **TCU DX and Free Cool**



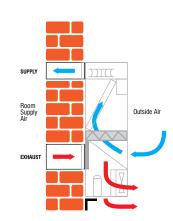
Low Ambient Mode -'Free-Cooling'



High Ambient Mode -'Mechanical Cooling'



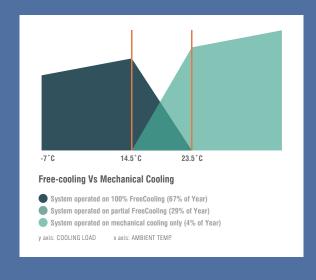
Low Ambient Mode -'Mechanical Cooling & Combined Free-Cooling



Low Ambient Mode -'Free-Cooling'

## Free-cooling

Free-cooling saves vast amounts of energy. One kilowatt of power saved every hour 24/7, represents a saving of £876\* a year, equivalent to over 4 tonnes of CO₂. The Ecotel™ takes advantage of low ambient temperatures by offering integrated concurrent free-cooling for up to 96% of the year and a typical 70% reduction in energy consumption. For up 67% of the year, the Ecotel™ can operate in 100% free-cooling mode.



### **Technical specifications**

Model no.	Total Cooling Duty (kW)*	Nominal Supply Airflow (m³/s)	Dimensions (H x W x D)mm	Operating Weight (kg)	Sound Pressure @ 3m dB(A)**	Sound pressure @ 3m (dBA)***
VTCU5	6.14	0.41	1716 x 775 x 451	185	64	53
VTCU8	7.94	0.41	1716 x 775 x 451	210	64	53
TCU11	11.0	0.95	2040 x 1365 x 595	280	64	55
TCU15	16.0	1.20	2040 x 1365 x 595	285	66	55
TCU15D	15.3	1.20	2040 x 1365 x 595	296	66	55
TCU19D	22.5	1.15	2040 x 1365 x 661	400	74	59

- Nominal Cooling Duty based on 27°C db / 19°C wb and 35°C ambient
- Full DX Cooling
  Free-cooling / Evaporator fans only

# Intelligent controls

## Seamlessly managing your system

The control centre of the Ecotel™ is a sophisticated electronic microprocessor with control logic specially developed by Airedale. The controls manage one free-cooling stage and up to three mechanical cooling stages (dependent on unit selection and requirement).

The microprocessor uses sensors to send and receive messages to and from active components such as the compressors, fans and pumps so they interact with each other, balancing cooling duty, temperature, airflow and pressure to exactly match the application.

By integrating intelligent components, the controller manages and optimises the system's performance and reduces power draw. In addition, the Ecotel™ offers a variety of other options including electric heating, emergency cooling, shut-off dampers and ACIS™ communication.























