



DATA SHEET 1503

# ECP60-03 EcoCooler

**Down Discharge • Top Discharge • Side Discharge**

The ECP60-03 evaporative cooler is manufactured by EcoCooling in an ISO 9002 quality environment. The cooler is designed to meet all European electrical, water and other safety legislation.

- The ECP60-03 can be configured as a top, side or down discharge cooler.
- It cools air through evaporation of water and incorporates a fan to drive air flow.
- The cooler can handle 8,370m<sup>3</sup>/hr or 11,160m<sup>3</sup>/hr of fresh air dependent on its configuration.
- All air supplied to the area being cooled must be extracted or exhausted from it.

**Material**

- Cabinet components are injection moulded in polypropylene.
- The cabinets are UV stabilised and corrosion resistant.

**Weights, Dimensions and Ductwork Connections**

See configuration sheets for the above information

**Electrical Supply**

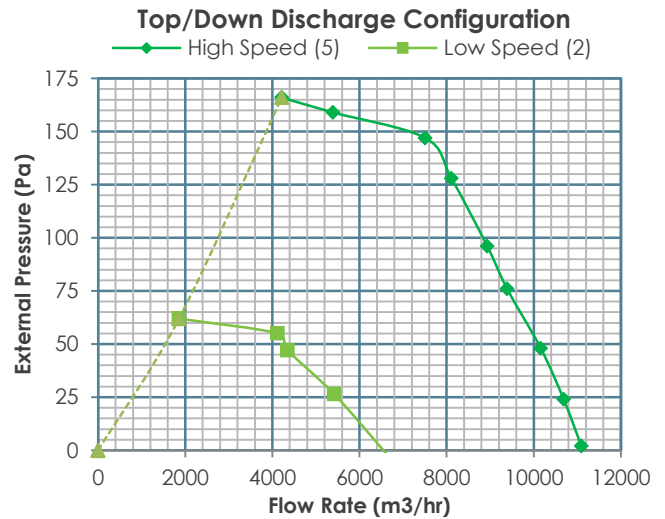
Voltage	1~ 240V 50Hz
Starting Current	12A
Running Current	8A
Protection	External isolator supplied

**Water Requirements**

<b>Water Supply</b>	
Water quality	Fresh potable water only
Minimum supply rate	500l/hr minimum
Minimum pressure	1 bar
Maximum pressure	7 bar
Connection	15 mm compression fitting to braided hose c/w adjustable flow restrictor
Control	<ul style="list-style-type: none"> <li>• Solenoid supply valve</li> <li>• Float level probe activated shut off</li> <li>• Optional actuated valves available for frost protection</li> </ul>
Compliance	<ul style="list-style-type: none"> <li>• WRAS compliant</li> <li>• Double check valve recommended</li> </ul>
<b>Drain</b>	
Capacity	2,000l/hr minimum
Connection offered	1" BSP male thread
Control	Drive Open-Normally Closed drain valve

**Cooling Pads**

Manufacturer	Munters
Material	CELdek® 5090
Saturation Efficiency	85-89%
Dimensions	680 x 850 x 100 mm



**Circulation Pump**

Flow Rate	1850l/hr (intermittent)
Power	50W
Voltage	220-240V
Pump Type	Centrifugal
Motor Type	Encapsulated shaded pole
Transmission	Magnetically coupled
Protection	Auto-reset Overload

**Control Options**

- Wall-mounted controller supplied as standard
- 5-speed manual control
- Automatic control available by connection to:
  - Thermostat
  - Timer
  - Humidistat
- Integrated contact for fire alarm shutdown
- Integrated relay to drive external fan

**Air Filtration**

- Integrated Insect Screens
  - Optional EU4 filtration
- See separate sheet for detail.*

**Maintenance**

- Integrated testing sequence
  - Recommended interval of 3-6 months
- Contact the manufacturer for application specific advice*

**Warranty**

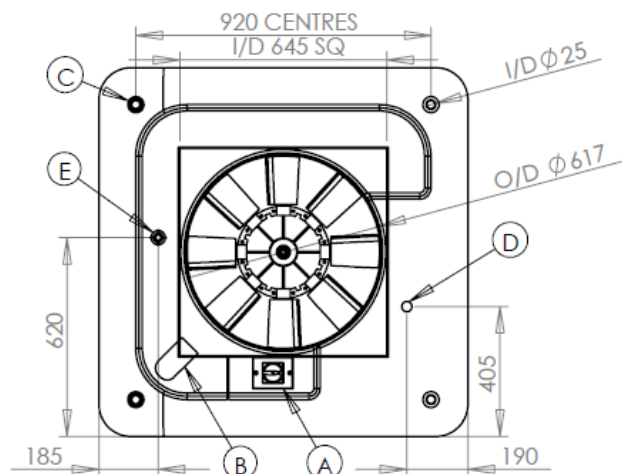
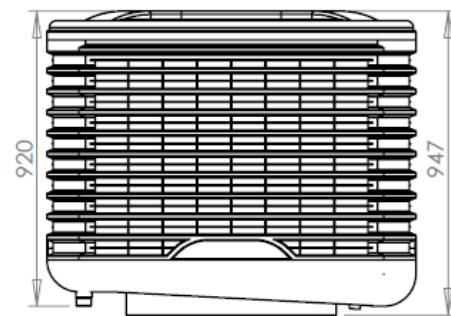
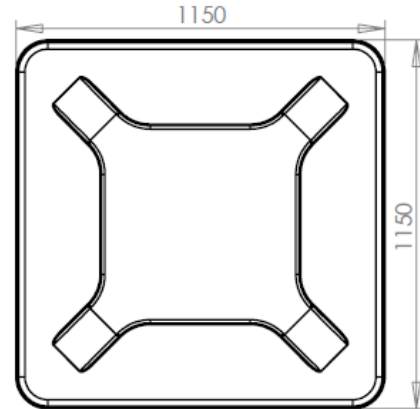
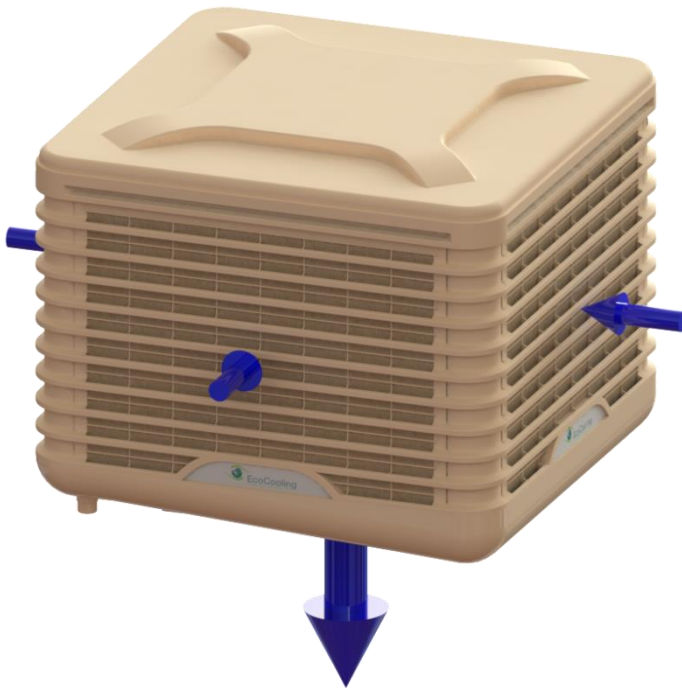
2 years parts only





## ECP60-03 Configuration Details

### Down Discharge



Note that all dimensions shown are nominal and have a ±10mm tolerance due to manufacturing processes employed.

#### Configuration Features

Maximum Flow Rate	11,160 m <sup>3</sup> /hr or 3.1 m <sup>3</sup> /s
Cooling Pad Area	2.3m <sup>2</sup>
Unit Size (H x W x D)	
Installed	947 x 1150 x 1150 mm
Delivered (incl. pallet)	1097 x 1170 x 1150 mm
Duct Connection Port	
Square	645 mm I/D (Female)
Weight	
Ventilation mode	105 kg
Cooling mode	155 kg
Sump at full capacity	170 kg
Delivered	125 kg

#### Serviceable Cooling Load (kW)

Dependant on:

- Temperature rise between supply and exhaust.
- Volumetric air flow rate.

Note that this does not describe the adiabatic cooling function.

Temp. Rise, ΔT	5°C	7.5 °C	10 °C	12.5 °C	15 °C
Air Flow					
11,160 m <sup>3</sup> /hr	19	28	38	47	56

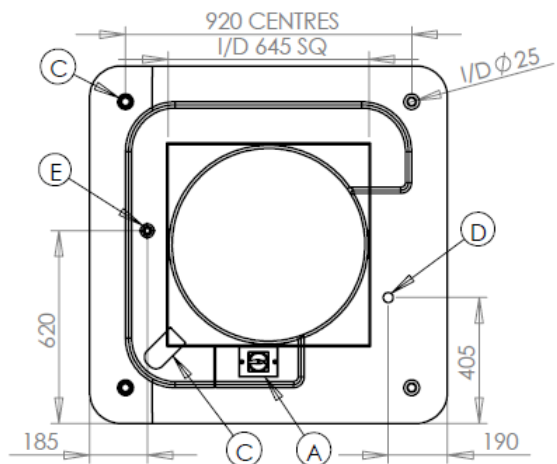
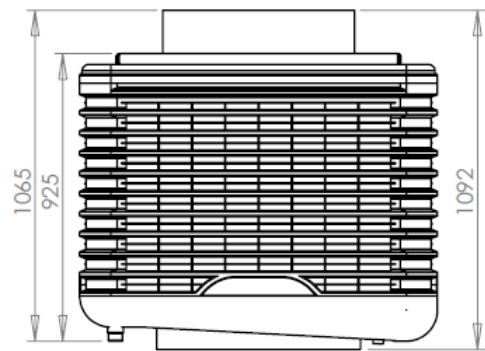
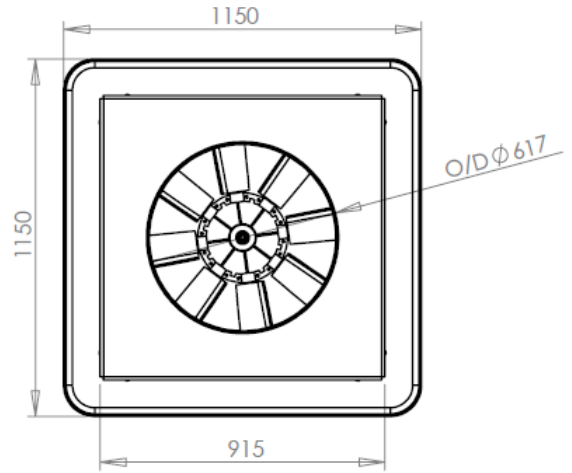
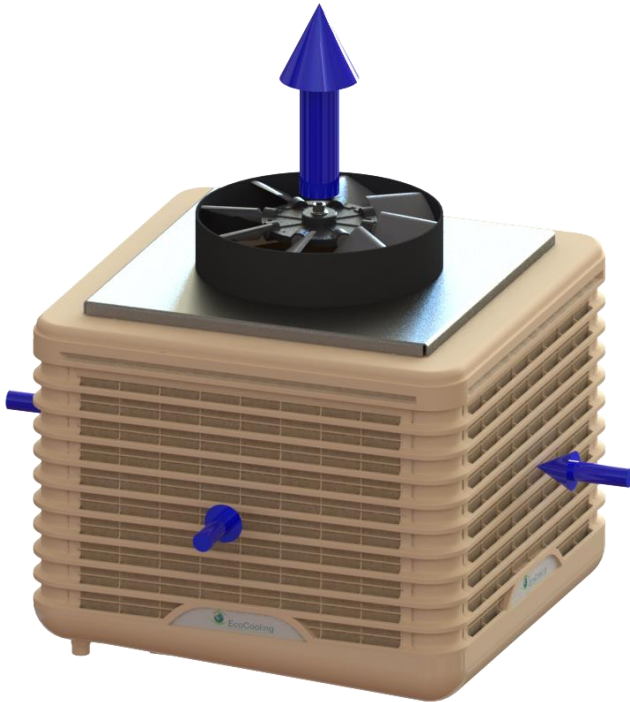
Calculated using  $\dot{Q} = (\dot{m}C_p)_{air} \Delta T$  with  $\rho_{air,NTP} = 1.204$  &  $C_{p,air,NTP} = 1.005$

A	Rotary Isolator
B	Control Panel Port
C	Support Socket (x4)
D	1" BSP Drain Valve
E	½" BSP Inlet Spigot



## ECP60-03 Configuration Details

### Top Discharge



Note that all dimensions shown are nominal and have a  $\pm 10\text{mm}$  tolerance due to manufacturing processes employed.

A	Rotary Isolator
B	Control Panel Port
C	Support Socket (x4)
D	1" BSP Drain Valve
E	1/2" BSP Inlet Spigot

#### Configuration Features

Maximum Flow Rate	11,160 m <sup>3</sup> /hr or 3.1 m <sup>3</sup> /s
Cooling Pad Area	2.3m <sup>2</sup>
Unit Size (H x W x D)	1092 x 1150 x 1150 mm
Delivered (incl. pallet)	1242 x 1170 x 1150 mm
Duct Connection Port	Round
	617 mm O/D (Male)
Weight	
Ventilation mode	110 kg
Cooling mode	160 kg
Sump at full capacity	175 kg
Delivered	135 kg

#### Serviceable Cooling Load (kW)

Dependant on:

- Temperature rise between supply and exhaust.
- Volumetric air flow rate

Note that this does not describe the adiabatic cooling function.

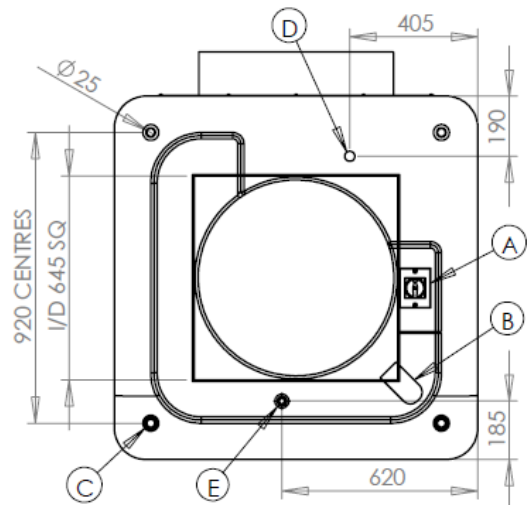
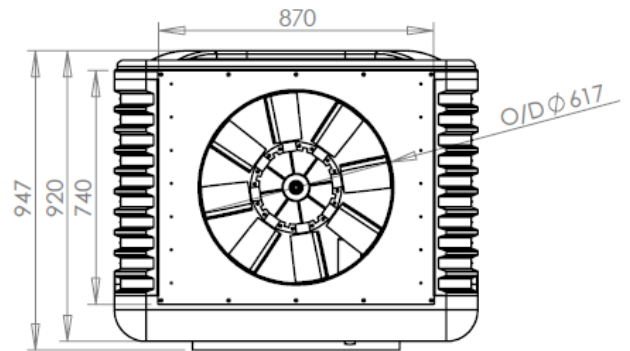
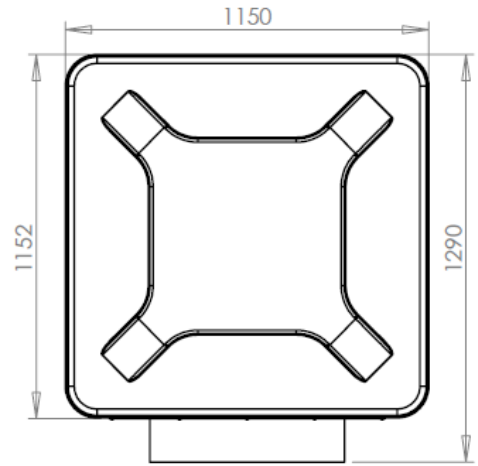
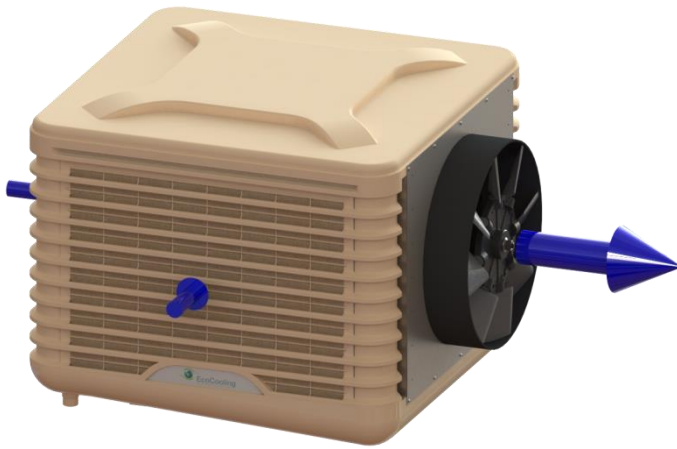
Temp. Rise, $\Delta T$	5°C	7.5 °C	10 °C	12.5 °C	15 °C
Air Flow					
11,160 m <sup>3</sup> /hr	19	28	38	47	56

Calculated using  $\dot{Q} = (\dot{m}C_p)_{air} \Delta T$  with  $\rho_{air,NTP} = 1.204$  &  $C_{p,air,NTP} = 1.005$



## ECP60-03 Configuration Details

### Side Discharge



Note that all dimensions shown are nominal and have a ±10mm tolerance due to manufacturing processes employed.

A	Rotary Isolator
B	Control Panel Port
C	Support Socket (x4)
D	1" BSP Drain Valve
E	1/2" BSP Inlet Spigot

#### Configuration Features

Maximum Flow Rate	8,370 m <sup>3</sup> /s or 2.3m <sup>3</sup> /s
Cooling Pad Area	1.7m <sup>2</sup>
Unit Size (H x W x D)	947 x 1290 x 1150 mm
Delivered (incl. pallet)	1350 x 1290 x 1150 mm
Duct Connection Port	Round
	617mm O/D (Male)
Weight	
Ventilation mode	105 kg
Cooling mode	150 kg
Sump at full capacity	165 kg
Delivered	125 kg

#### Serviceable Cooling Load (kW)

Dependant on:

- Temperature rise between supply and exhaust.
- Volumetric air flow rate

Note that this does not describe the adiabatic cooling function.

Temp. Rise, ΔT	5°C	7.5 °C	10 °C	12.5 °C	15 °C
Air Flow					
8,370 m <sup>3</sup> /hr	14	21	28	35	42

Calculated using  $\dot{Q} = (\dot{m}C_p)_{air} \Delta T$  with  $\rho_{air,NTP} = 1.204$  &  $C_{p,air,NTP} = 1.005$