## EVAPORATIVE COOLER PUMPS

### ebmpapst Evaporative Cooler Pump

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBMALPHA</td>
<td>$144.65</td>
</tr>
</tbody>
</table>

- **Capacity @ 1.0 metre Head**: 32 litres/min
- **Capacity @ 2.0 metre Head**: 25 litres/min
- **Power Supply**: 240V/1/50Hz
- **Nominal Watts**: 50 watts
- **Outlet Connection**: 20mm

### Fasco Evaporative Cooler Pumps

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Ltr/min)</th>
<th>Head (mm)</th>
<th>Electrical Data</th>
<th>Outlet</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP28ST (replaces JRM28)</td>
<td>24.0</td>
<td>600</td>
<td>240V/1/50Hz 0.38 Amps Output: 10W Nominal: 45W</td>
<td>20mm</td>
<td>$110.88</td>
</tr>
<tr>
<td></td>
<td>21.5</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20.0</td>
<td>1200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>18.0</td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>16.5</td>
<td>1600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP38ST (replaces JRM38)</td>
<td>29.5</td>
<td>600</td>
<td>240V/1/50Hz 0.43 Amps Output: 15W Nominal: 50W</td>
<td>20mm</td>
<td>$124.35</td>
</tr>
<tr>
<td></td>
<td>27.5</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>26.0</td>
<td>1200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>24.5</td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23.0</td>
<td>1600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EP50ST (replaces JRM50)</td>
<td>38.0</td>
<td>600</td>
<td>240V/1/50Hz 0.58 Amps Output: 20W Nominal: 60W</td>
<td>20mm</td>
<td>$137.44</td>
</tr>
<tr>
<td></td>
<td>35.5</td>
<td>1000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.0</td>
<td>1200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32.0</td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30.5</td>
<td>1600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JRMBASKET</td>
<td>Filter Basket – Optional</td>
<td>$12.55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Latent Evaporative Cooler Pumps

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Ltr/min)</th>
<th>Head (mm)</th>
<th>Volts/Hz</th>
<th>Outlet</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>T0030L</td>
<td>27.5</td>
<td>1000</td>
<td>240V/1/50Hz</td>
<td>20mm</td>
<td>$84.94</td>
</tr>
<tr>
<td></td>
<td>24.0</td>
<td>1500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T0035L</td>
<td>35.5</td>
<td>1000</td>
<td>240V/1/50Hz</td>
<td>20mm</td>
<td>$91.47</td>
</tr>
<tr>
<td></td>
<td>31.0</td>
<td>1500</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Tornado Evaporative Cooler Pump - (replaces Magnadrive)

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity Ltr/min</th>
<th>Head Mtr</th>
<th>Volts/Hz</th>
<th>Outlet</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVAPUMPMPMAG</td>
<td>18.0</td>
<td>1.2</td>
<td>230/50</td>
<td>20mm</td>
<td>$305.45</td>
</tr>
</tbody>
</table>

ALL PRICES ARE EXCLUSIVE OF GST
SUBJECT TO CHANGE WITHOUT NOTICE
EFFECTIVE MARCH 2014
<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Litres/Hr)</th>
<th>*Head (Metres)</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE1200</td>
<td></td>
<td>0</td>
<td>For Air Conditioners up to 10.0kw</td>
<td>$396.00</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Pump Unit Size (mm): 78L x 42W x 46H</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Sensor Unit Size (mm): 82L x 39W x 39H</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Electrical Specs: 230V 50/60Hz 18VA</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch: NO/NC, max.230V, 8A (ohmic load)</td>
<td></td>
</tr>
</tbody>
</table>

*Head (delivery height) is from pump outlet.

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Litres/Hr)</th>
<th>*Head (Metres)</th>
<th>Pump with 2-Level Float switch Sensor</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE600</td>
<td></td>
<td>0</td>
<td>For Air Conditioners up to 7.5kw</td>
<td>$266.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Pump Unit Size (mm): 77L x 32W x 50H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Sensor Unit Size (mm): 82L x 39W x 39H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Electrical Specs: 230V 50/60Hz 18VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch: not applicable</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Head (delivery height) is from pump outlet, maximum suction height of EE600 is 1.5 metres.

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Litres/Hr)</th>
<th>*Head (Metres)</th>
<th>Pump with 3-Level Float switch Sensor</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE1000</td>
<td></td>
<td>0</td>
<td>For Air Conditioners up to 10.0kw</td>
<td>$302.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Pump Unit Size (mm): 77L x 32W x 50H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Sensor Unit Size (mm): 82L x 39W x 39H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Electrical Specs: 230V 50/60Hz 18VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch: NO/NC, max.230V, 8A (ohmic load)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Head (delivery height) is from pump outlet, maximum suction height of EE1000 is 2.5 metres.

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Litres/Hr)</th>
<th>*Head (Metres)</th>
<th>Pump with 3-Level Float switch Sensor</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE1800</td>
<td></td>
<td>0</td>
<td>For Air Conditioners up to 18.0kw</td>
<td>$360.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Pump Unit Size (mm): 77L x 32W x 50H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>Sensor Unit Size (mm): 82L x 39W x 39H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>Electrical Specs: 230V 50/60Hz 18VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch: NO/NC, max.230V, 8A (ohmic load)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Head (delivery height) is from pump outlet, maximum suction height of EE1800 is 2.5 metres.

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Litres/Hr)</th>
<th>*Head (Metres)</th>
<th>Pump with Tank/Reservoir</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE150</td>
<td></td>
<td>0</td>
<td>For Air Conditioners up to 50.0kw</td>
<td>$230.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Pump Unit Size (mm): 165L x 65W x 85H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1.5</td>
<td>Electrical Specs: 230V 50/60Hz 48VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch: not applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tank/Reservoir Capacity: max.0.2 litres</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Head (delivery height) is from pump outlet, outlet pressure hose (not included) 8mm inside diam x 2mm thick wall.

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Capacity (Litres/Hr)</th>
<th>*Head (Metres)</th>
<th>Pump with Tank/Reservoir</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE400</td>
<td></td>
<td>0</td>
<td>For Air Conditioners up to 50.0kw</td>
<td>$276.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>Pump Unit Size (mm): 185L x 85W x 100H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>Electrical Specs: 230V 50/60Hz 65VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch: NO/NC, max.230V, 8A (ohmic load)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Tank/Reservoir Capacity: max.0.5 litres</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Head (delivery height) is from pump outlet, outlet pressure hose (not included) 8mm inside diam x 2mm thick wall.

<table>
<thead>
<tr>
<th>Airefrig Part Number</th>
<th>Constant Flow</th>
<th>*Head (Metres)</th>
<th>Reciprocating Pump ultra-quiet for sensitive areas</th>
<th>Technical Information</th>
<th>List Price Excl GST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE900M</td>
<td>6 (L/Hour)</td>
<td>7mtr</td>
<td>Constant flow independent of discharge height</td>
<td>$396.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>maximum discharge</td>
<td>3x sensing opts: float, temp sensors &amp; cool signal</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2mtr</td>
<td>Pump Unit Size (mm): 152L x 85W x 114H</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>maximum delivery</td>
<td>Electrical Specs: 230V 50/60Hz 10VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Alarm Switch(float option): N/O, 48V AC/DC, 1.5A</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Head (max discharge= pump outlet / max delivery= pump inlet) pressure hose (not included) 6mm ID x 2mm wall.
The EE1200 condensate pump is ready to be integrated into a Latent duct elbow (part number: FB105) allowing it to be installed directly on the outlet side of the air conditioner. This pump is suitable for mini split, ceiling and wall mounted air conditioners.

**Technical Data**

- **Maximum flow rate:** 8 l/h
- **Maximum delivery height:** 6-metre head (Delivery height is from pump outlet)
- **Voltage:** 230/1/50 **Output:** 18VA
- **Pump Dimensions:** 78(L) x 42(W) x 46(H) mm
- **Sensor Dimensions:** 82(L) x 39(W) x 39(H) mm
- **Alarm Switch:** normally open / normally closed voltage free contacts. (Max 230V, 8A res.) Can be wired to cut out the air conditioner and prevent any overflow using a relay or contactor.
- **Housing Components:** Manufactured from self-extinguishing materials.
- **Warranty Period:** 12 months (parts or replacement only)

**Electrical Connection:**
- Connect pump to 230v 50Hz mains using 3 x 0.75mm² cable.
- Pump must be earthed / grounded.
- Ensure that the electrical connections to the pump are sealed fully using the insulating cap as per the manufacturers instructions.
LATENT CONDENSATE PUMPS - EE1200

Pump Installation:
- Clean all elements of the air conditioning unit’s drain, in order to ensure that the condensate water to be pumped will be clean.
- The drain tank should be deep enough such that it is capable of containing the water, above the alarm level, which will continue to flow from the evaporator in the event of a power failure.
- The pump assembly is able to be installed on either the left or right side of the air conditioner.
- Mark and drill the holes to fix the elbow to the wall fit the elbow, polystyrene hull and the duct.
- Connect the detection sensor to the air conditioner unit’s drain tank (according to instruction manual) Then fit the ventilation tube onto the sensor and position the pump and detection sensor into the elbow.
- Connect the discharge tube to the pump using a 6mm flexible tube.
- The electrical cable must be attached to the anti-wrenching support using a cable tie.
- Before closing the duct it is advised to support the cable and the discharge tube between the insulation of the refrigerant pipes, so they do not touch the walls and the lid of the duct. This will help to decrease the noise level of the installation.

Note:
- When installing a condensate pump make sure that it is installed in such a way that there is access to the pump and sensor for required maintenance.
- Clear vinyl tube 6.0mm ID x 1.5mm wall for the delivery line is available from Airefrig Australia if required. (P/No: 3220207 – sold by the metre)

Starting Procedure:
- Before start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that all hoses are connected properly.
- Pour water into the air conditioner’s drain tank & check the pump switches on & off when the water rises or falls
- To check operation of the alarm switch keep adding water until the alarm function is triggered (Check that the alarm contacts work ie. air conditioner cut-out or audible/visual warning signal, etc.)

Required Preventative Maintenance:
- Maintenance is required at least every 12 months before the start of the season.
- Turn all power to the pump off. (Warning: alarm contacts may have different power source)
- Remove the lid of the elbow to access the sensor.
- Remove the sensor.
- Carefully take off the lid and remove the float.
- Using a mild commercial cleaning agent, carry out the following.
- Clean the filter, float & the inside of the sensor housing.
- Re-assemble making sure that the magnet on the float points downwards.
- Some environments may require service more frequently.
The EE600 condensate pump is comprised of two parts – the pump & float switch & is suitable for integration into air conditioners – mini split, ceiling and wall mounted units. The small sensor can easily be adapted to fit the air conditioners condensate drain hose. The pump assembly is supplied with 2 x adhesive cellular tape pads, breather pipe, rubber drain connection tube, 1.5 metres of 6mm suction hose & instruction sheet.

**Technical Data**

**Maximum flow rate:** 6 l/h

**Maximum delivery height:** 6.0 metre head  
(Delivery height is from pump outlet)

**Maximum suction height:** 1.5 metre head  
(Suction height is between sensor & pump inlet)

**Voltage:** 230/1/50  
**Output:** 18VA

**Pump Dimensions:** 77(L) x 32(W) x 50(H) mm

**Sensor Dimensions:** 82(L) x 39(W) x 39(H) mm

**Alarm Switch:** not applicable to this model

**Thermal Protection:** Pump will automatically switch off if temperature at the piston drive reaches over +100 degrees Celsius.  (Auto reset after cooling period)

**Housing Components:** Manufactured from self-extinguishing materials.

**Warranty Period:** 12 months (parts or replacement only)

**Electrical Connection:**  
- Connect pump to 230v 50Hz mains using 3 x 0.75mm² cable.  
- Pump must be earthed / grounded (PE connection)
LATENT CONDENSATE PUMPS - EE1000

The EE1000 condensate pump is comprised of two parts – the pump & float switch & is suitable for integration into air conditioners – mini split, ceiling and wall mounted units. The small sensor can easily be adapted to fit the air conditioners condensate drain hose. The pump assembly is supplied with 2 x adhesive cellular tape pads, breather pipe, rubber drain connection tube, 1.5 metres of 6mm suction hose & instruction sheet.

Technical Data

**Maximum flow rate:** 10 l/h

**Maximum delivery height:** 10.0 metre head (Delivery height is from pump outlet)

**Maximum suction height:** 2.5 metre head (Suction height is between sensor & pump inlet)

**Voltage:** 230/1/50 **Output:** 18VA

**Pump Dimensions:** 77(L) x 35(W) x 62(H) mm

**Sensor Dimensions:** 82(L) x 39(W) x 39(H) mm

**Alarm Switch:** normally open / normally closed voltage free contacts. (Max 230V, 8A res.) Can be wired to cut out the air conditioner and prevent any overflow using a relay or contactor.

**Thermal Protection:** Pump will automatically switch off if temperature at the piston drive reaches over +100 degrees Celsius. (Auto reset after cooling period)

**Housing Components:** Manufactured from self-extinguishing materials.

**Warranty Period:** 12 months (parts or replacement only)

---

**Electrical Connection:**
- Connect pump to 230v 50Hz mains using 3 x 0.75mm² cable.
- Pump must be earthed / grounded (PE connection)

**Replacement sensor unit** part # 9001301008
The EE1800 condensate pump is comprised of two parts – the pump & float switch & is suitable for integration into air conditioners – mini split, ceiling and wall mounted units. The small sensor can easily be adapted to fit the air conditioners condensate drain hose. The pump assembly is supplied with 2 x adhesive cellular tape pads, breather pipe, rubber drain connection tube, 1.5 metres of 6mm suction hose & instruction sheet.

### Technical Data

**Maximum flow rate:** 18 l/h

**Maximum delivery height:** 10.0 metre head
(Delivery height is from pump outlet)

**Maximum suction height:** 2.5 metre head
(Suction height is between sensor & pump inlet)

**Voltage:** 230/1/50  **Output:** 18VA

**Pump Dimensions:** 77(L) x 35(W) x 62(H) mm

**Sensor Dimensions:** 82(L) x 39(W) x 39(H) mm

**Alarm Switch:** normally open / normally closed voltage free contacts. (Max 230V, 8A res.)
Can be wired to cut out the air conditioner and prevent any overflow using a relay or contactor.

**Thermal Protection:** Pump will automatically switch off if temperature at the piston drive reaches over +100 degrees Celsius. (Auto reset after cooling period)

**Housing Components:** Manufactured from self-extinguishing materials.

**Warranty Period:** 12 months (parts or replacement only)
LATENT CONDENSATE PUMPS – EE600, EE1000 & EE1800

Pump Installation and Mounting:
- Can be mounted Horizontally or Vertically. (DO NOT MOUNT UPSIDE DOWN)
- It is recommended to secure the pump into position to prevent contact that may transmit vibration or running noise.
- Allow sufficient clearance around the pump to ensure that the pump is able to cool down after prolonged operation. (DO NOT insulate or cover the pump)
- Arrow on the pump indicates direction of flow.
- Prior to start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.

Sensor Installation and Mounting:
- Always install the float module horizontally.
- Maximum angle the sensor can be mounted is 10 degrees.
- The sensor can be mounted directly onto metal surfaces without any detrimental effects on the magnetic float.
- Ensure the plastic bracket and adhesive tape (supplied) is used to secure the sensor.
- Drain or breather tube (150mm x 6mm diam.) should be fitted to easily dispel air.
- Sensor can be fitted to the end of the split air conditioner drain tube or on other types of air conditioners connected to the side outlet of the condensate tank.

Note:
- When installing a condensate pump make sure that it is installed in such a way that there is access to the pump and sensor for required maintenance.
- Clear vinyl tube 6.0mm ID x 1.5mm wall for the delivery & suction lines are available from Airefrig Australia if required (P/No: 3220207 – sold by the metre)
- Sensor - pump wiring extension leads are available on request through Airefrig Australia.

Starting Procedure:
- Before start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that all hoses are connected properly.
- Pour water into the air conditioner drain and check the pump switches on and off when the water rises or drops.
- To check operation of the alarm switch keep adding water until the alarm function is triggered (Check that the alarm contacts work ie. air conditioner cut-out or audible/visual warning signal, etc.)

Required Preventative Maintenance:
- Maintenance is required at least every 12 months before the start of the season.
- Turn all power to the pump off. (Warning: alarm contacts may have different power source)
- Remove the sensor from the bracket.
- Carefully take off the lid and remove the float.
- Using a mild commercial cleaning agent, carry out the following.
- Clean the filter, float & the inside of the sensor housing.
- Re-assemble making sure that the magnet on the float points downwards.
- Some environments may require service more frequently.
The EE150 condensate pump is designed to automatically remove water from air conditioners and evaporator coils etc. This pump has its own reservoir / tank.

**Features**

- Silent running – centrifugal pump
- 1.5 metre 3 x core power lead
- Ball Bearing drive shaft
- Can be Wall mounted
- Check valve to prevent back-flow of condensate water into the pump

**Technical Data**

- **Maximum flow rate:** 120 l/h
- **Maximum head:** 1.5 metres
- **Voltage:** 230/1/50  **Output:** 48VA
- **Housing:** Made from tough corrosion & impact resistant ABS plastic
- **Warranty Period:** 12 months (parts or replacement only)
- **Pressure Hose:** Not supplied - 8.0mm ID x 2.0mm wall clear vinyl tube is recommended & available from Airefrig Australia if required (P/No: 3220257 - sold by the metre)
- **Tank / Reservoir Capacity:** max. 0.2 litres
- **Compact size:** 165(L) x 65(W) x 85(H) mm

**Pump Installation and pipe connections**

- Pump assembly must be mounted level & the inlet must be below the lowest drain point
- When installing the pump assembly, make sure that it is installed in such a way that there is access to the pump for required maintenance.
- Run flexible tubing or pipe from the condensate drain on the evaporator pan and / or drain to the inlet hole on the pump assembly. This drain line should have a continuous downward slope to allow for gravity flow. Cut the end of the line at an angle so the end does not close off on the bottom of the pump’s tank.
- Connect the discharge line by hand – tighten the cap nut of the check valve in a clockwise direction. Clear vinyl tube 8.0mm ID x 2.0 wall mm is recommended. Extend the discharge line straight up from the pump to the highest point, run the discharge line to a drain with a downward slope.
- For best results, the drain should be below or approximately level with the bottom of the pump’s tank. If it is not possible to slope the line downward, make an inverted “U” trap at the highest point of the discharge line above the pump.
- Make sure pump is connected to a constant power source, not a fan or other device that may run intermittently.
LATENT CONDENSATE PUMPS - EE150

Starting & Testing Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate any foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that the hose is connected properly.
- Pour water into the pump reservoir and check the pump switches on and off when the water rises or drops.
- To test the overflow alarm circuit:
- Kink the tube coming from the pump discharge, or turn off power supply
- Pour water into the pump reservoir, filling it completely.
- As the water level nears the top of the unit, the overflow alarm switch will activate. (Eg. triggering alarm circuit, if used.)
- Un-kink the tube, or turn power back on and allow the pump to empty the tank, as the water level drops the overflow safety switch will de-activate.

Required Preventative Maintenance:

- Maintenance is required at least every 12 months before the start of the season. Some environments may require service more frequently.
- Turn off all power to the pump.
- Remove the reservoir / tank cover & lift the drive / pump unit out
  (The tank of the EE150 can be removed by inserting a screwdriver in one of the side slots of the tank & leveraging it away – do not overstress the material – then remove the 2 x Phillips screws located on top.)
- Remove the discharge line from the check valve by unscrewing the cap nut
- Unscrew the check valve from the drive / pump unit using a SW20 wrench
- Check the valve for any obstructions or damage.
- **To re-install valve, tighten by hand then a half turn more using the SW20 wrench.**
- Check that the float mechanisms are clean & move up & down freely.
- Clean the reservoir / tank & float mechanisms using a damp cloth & mild detergent
- Do not open the drive / pump unit, as this should never require maintenance.
- **Note: breaking the seal on the drive / pump assembly may void warranty.**
- Re-assemble unit in reverse order & check operation
LATENT CONDENSATE PUMPS - EE400

The EE400 condensate pump is designed to automatically remove water from air conditioners and evaporator coils etc. This pump has its own reservoir / tank but can be taken out of its housing and placed into an external pan if required. (pan height requirements need to be maximum height of 70mm & minimum height of 60mm).

Features

- Silent running – centrifugal pump
- Pump encapsulated and liquid cooled
- 1.5 metre 3 x core power lead
- Ball Bearing drive shaft
- Overflow safety alarm switch (1metre 2 x core lead)
- Wall mounting bracket
- Check valve to prevent back-flow of condensate water into the pump

Technical Data

- Maximum flow rate: 350 l/h
- Maximum head: 4 metres
- Voltage: 230/1/50   Output: 65VA
- Alarm Switch: Voltage free contacts. (max. 24V, 6VA, normally open)
- Housing: Made from tough corrosion & impact resistant ABS plastic
- Warranty Period: 12 months (parts or replacement only)
- Pressure Hose: Not supplied - 8.0mm ID x 2.0mm wall clear vinyl tube is recommended & available from Airefrig Australia if required (P/No: 3220257 - sold by the metre)
- Tank / Reservoir Capacity: max. 0.5 litres
- Compact size: 185(L) x 85(W) x 100(H) mm   Weight: 1600 grams

Pump Installation and pipe connections

- Pump assembly must be mounted level & the inlet must be below the lowest drain point
- When installing the pump assembly, make sure that it is installed in such a way that there is access to the pump for required maintenance.
- Run flexible tubing or pipe from the condensate drain on the evaporator pan and / or drain to the inlet hole on the pump assembly. This drain line should have a continuous downward slope to allow for gravity flow. Cut the end of the line at an angle so the end does not close off on the bottom of the pump’s tank.
- Connect the discharge line by hand – tighten the cap nut of the check valve in a clockwise direction. Clear vinyl tube 8.0mm ID x 2.0 wall mm is recommended. Extend the discharge line straight up from the pump to the highest point, run the discharge line to a drain with a downward slope.
- For best results, the drain should be below or approximately level with the bottom of the pump’s tank. If it is not possible to slope the line downward, make an inverted “U” trap at the highest point of the discharge line above the pump.
- Make sure pump is connected to a constant power source, not a fan or other device that may run intermittently.
LATENT CONDENSATE PUMPS - EE400

Starting & Testing Procedure:

- Before start up ensure that the system is thoroughly cleaned to eliminate any foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that the hose is connected properly.
- Pour water into the pump reservoir and check the pump switches on and off when the water rises or drops.
- To test the overflow alarm circuit:
- Kink the tube coming from the pump discharge, or turn off power supply
- Pour water into the pump reservoir, filling it completely.
- As the water level nears the top of the unit, the overflow alarm switch will activate. (Eg. triggering alarm circuit, if used.)
- Un-kink the tube, or turn power back on and allow the pump to empty the tank, as the water level drops the overflow safety switch will de-activate.

Required Preventative Maintenance:

- Maintenance is required at least every 12 months before the start of the season. Some environments may require service more frequently.
- Turn off all power to the pump.
  **Warning alarm contacts may have different power source.**
- Remove the reservoir / tank cover & lift the drive / pump unit out
- Remove the discharge line from the check valve by unscrewing the cap nut
- Unscrew the check valve from the drive / pump unit using a SW20 wrench
- Check the valve for any obstructions or damage.
  To re-install valve, tighten by hand then a half turn more using the SW20 wrench.
- Check that the float mechanisms are clean & move up & down freely.
- Clean the reservoir / tank & float mechanisms using a damp cloth & mild detergent
- Do not open the drive / pump unit, as this should never require maintenance.
  **Note: breaking the seal on the drive / pump assembly may void warranty.**
- Re-assemble unit in reverse order & check operation
LATENT CONDENSATE PUMPS – EE900M

The patented and whisper-quiet EE900M pump is designed for condensate removal in noise sensitive areas.

In contrast to conventional peristaltic pumps, the EE900M operates on the same principle as a reciprocating piston pump (i.e. no peristaltic tube resulting in a maintenance free pump, with no wear & tear or costly tube replacement).

- Low noise levels are achieved due to the slow movement of the piston.
- The pump maintains a constant flow rate independent of the discharge height.
- 6mm ID x 2mm wall flexible pipe is required for delivery & suction lines (not supplied with pump)
- A test switch located on the side of the pump will allow pump to run for approximately 3 minutes.

EE900M pumps can be configured to operate with 1 of 3 sensing options:
- Water level float detection sensor (supplied standard with pump).
- Temperature differential (optional sensor kit - purchased separately).
- Cooling Signal – wire to the air conditioning unit cooling signal.
  (Note: The cooling signal option should not be used with inverter units)

Maximum flow rate: 6 l/h

Maximum delivery height: 7 metre head
(Delivery height is from pump outlet)

Maximum suction height: 2 metre head
(Suction height is between sensor & pump inlet)

Voltage: 230/1/50 Output: 10VA

Pump Weight: 700g

Pump Dimensions: 152(L) x 85(W) x 114(H) mm

Sensor Dimensions: 82(L) x 39(W) x 39(H) mm

Alarm Switch: 48V AC/DC / 1.5A (resistive load), N/O normally open
(Note: alarm switch is available only when water level float sensor option is used)

IP Rating: 20

Housing Components: Manufactured from self-extinguishing materials.

Warranty Period: 12 months (parts or replacement only)

Electrical connections:
Brown wire: Phase
Blue wire: Neutral
Green / yellow wire: PE
Black wire: Cooling Signal
Red wire: Alarm contact
White wire: Alarm contact

Replacement sensor unit part # 9001301011
Optional sensor kit part # 9704010011
Option with Water level float sensor

Install the pump in the intermediate ceiling using the relevant mounting holes.
Connect the water level sensor to the pump.

Alarm switch notes:
The integrated alarm switch (N/O, normally open) is used for overflow detection and should be wired in.
The pump has a build in alarm delay of 10s to prevent false alarms.
Maximum allowed Voltage: 48 V AC/DC
Maximum allowed Current: 1.5A (resistive load)

Sensor Installation and Mounting:
- Always install the float module horizontally.
- Maximum angle the sensor can be mounted is 10 degrees.
- The sensor can be mounted directly onto metal surfaces without any detrimental effects on the magnetic float.
- Drain or breather tube (150mm x 6mm diam.) should be fitted to easily dis Noel air.
- Sensor can be fitted to the end of the split air conditioner drain tube or on other types of air conditioners connected to the side outlet of the condensate tank.

Starting Procedure:
- Before start up ensure that the system is thoroughly cleaned to eliminate metal splinters and foreign bodies that may damage or impair the condensate pumps operation.
- Make sure that all hoses are connected properly.
- Pour water into the air conditioner drain & check the pump switches on and off when the water rises or drops.
- To check operation of the alarm switch keep adding water until the alarm function is triggered (Check that the alarm contacts work ie. air conditioner cut-out or audible/visual warning signal, etc.)

Required Preventative Maintenance:
- Maintenance is required at least every 12 months before the start of the season.
- Turn all power to the pump off. (Warning: alarm contacts may have different power source)
- Remove the sensor.
- Carefully take off the lid and remove the float.
- Using a mild commercial cleaning agent, carry out the following.
- Clean the filter, float & the inside of the sensor housing.
- Re-assemble making sure that the magnet on the float points downwards.
- Some environments may require service more frequently.
Option to Control by Temperature Sensors

Install the pump in the intermediate ceiling using the relevant mounting holes.
The red sensor measures the ambient temperature (“air on”)
The blue sensor measures the temperature of the cold air-conditioner airflow (“air off”).
The pump starts working at a temperature difference of 7°C.

Warning:
Sensors must never touch the gills of the heat exchange.

Option to Control by the Cooling Signal

Install the pump in the intermediate ceiling using the relevant mounting holes.
Connect the black wire to the live (230V cooling signal) of the compressor.
The pump only works during the cooling phase of the air-conditioner.
The pump is controlled by the cooling signal and has an overrun time of 3 minutes.

Warning:
Do not connect the black wire to live directly, as continuous operation of the pump is not allowed.
Do not use the cooling signal option on inverter units.