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**Product Name :**  
Vapour Jet Refrigerator And Heat Pump

**Product Code :**  
LBNY-0005-11700033



#### **Description :**

Vapour Jet Refrigerator And Heat Pump A simple ejector performs the expansion and compression processes involved in the combined cycles. A small electric motor drives the pump of the Rankine cycle. The heat source is electrically heated and produces high pressure vapour to drive the ejector.

A bench top example of a Vapour Jet Refrigerator And Heat Pump that is driven by a heat source. The unit operates on a combined Rankine and vapour compression refrigeration cycle using a low pressure, non-toxic ozone friendly refrigerant.

#### **Technical Specification :**

Panel: High quality plastic on which the following are mounted:

Steam Generator: Rectangular glass reinforced plastic insulated vessel fitted with 1.5kW immersion heater and containing the refrigerant vapour generator.

Ejector or ThermoCompressor: Nozzle: Convergent-divergent, throat diameter 1.7mm.

Feed Pump: Reciprocating plunger type pump fitted with P.T.F.E. seals and water jacket, driven by electric motor through worm reduction gearbox to give approximately 60 double strokes/minute.

Throttle Valve: Manually adjustable to vary nozzle inlet pressure.

Diffuser: With combining cone, parallel and divergent portions.

Refrigerant Vapour Generator: Cylindrical stainless steel shell, 75mm dia x 200mm long, with dished ends fitted with sight glass and pre-heating coil.

Evaporator: Thick walled glass cylinder fitted with metal end plates and P.T.F.E seals. Evaporator incorporating a 500W heater controlled by a variable transformer and a float type expansion valve.

Condenser: Thick walled glass cylinder fitted with water cooling coil. Surface area of coil: 0.1m<sup>2</sup>.



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