



# Principle of operation

Refrigerant condensers

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**Refrigerant vapour (1)** circulates through an **evaporative condensing coil (2)**, which is continuously wetted by the **spray system (3)** installed at the top of the condenser. At the same time the **individual driven axial fans (4)**, located at the bottom of the unit, blow ambient **air (5)** upwards through the condenser. During operation, heat is transferred from the refrigerant to the water, and then to the atmosphere as a portion of the water that evaporates. The condensed vapour then **exits the unit (6)**. The remaining spray water is collected into the **sloping sump (7)**. The **air inlet shields (8)** prevent water splash-out to the outside of the unit. The spray water **pump (9)** recirculates the water up to the water spray system. The warm saturated **air (10)** leaves the condenser through the drift **eliminators (11)**, which remove water droplets from the air.

**Interested in the Vertex<sup>®</sup> condenser?** Contact your local [BAC representative](#) for more information.