

## STANDARD CONSTRUCTION

Component	Construction
<b>Heat Exchanger</b>	<b>All Models.</b> A unique spiralled smoothbore copper tube-in-tube pre-cooler, re-heater and evaporator, with refrigerant flowing through the small tubes and compressed air flowing through the outer tube. Insulated with polystyrene panels. Maximum working pressure 232 psig standard, 250 psig optional.

Component	Construction
<b>Precooler / Reheater</b>	Provided on all models to reduce the incoming cooling load. The precooler/reheater is a heat exchanger in which the warm, moist compressed air is cooled by the cold dried air coming from the evaporator. The precooler/reheater is a spiral copper tube-in-tube construction insulated with polystyrene.

Component	Construction
<b>Water Separator</b>	All models are equipped with demister type moisture separators to remove the condensed liquids from the compressed air after the evaporator. The demister combines a high efficiency with a low-pressure drop. Separators are fitted within a carbon steel construction, with an internal stainless steel mesh. All models are equipped with an automatic drain. The water separator is insulated in formed polystyrene.

Component	Construction
<b>Refrigerant Compressor</b>	Hermetically sealed compressor. Motor overload protection is provided on all units. All units use UL approved electrical components. All refrigerant compressors utilise refrigerant R134a.

Component	Construction
<b>Refrigerant Condenser</b>	The refrigerant circuit is equipped with a condenser to return the refrigerant back to its liquid state, prior to entering the automatic expansion valve. The standard condenser has an air-cooled configuration with an integral fan cooling the air flow. The condenser coil features copper tubes and aluminium fins.
<b>Fan</b>	Axial fan, complete with external protection grille and nozzle. The electrical motors feature IP 55 protection, and class F insulation.

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<b>Refrigerant Circuit General</b>	All models are equipped with the following items in the refrigerant circuit:  <b>Filter / Dryer</b> The filter dryer is of a solid desiccant type construction. This ensures that the refrigerant is in an optimum condition at all times.  <b>Automatic expansion valve</b> This valve is in solid brass. The 100% modulating valve ensures optimum dew point control under all operating conditions. The automatic expansion valve features a pressure actuated design, who's immediate reaction to variations in airflow guarantees a linear pressure dew point. It maintains a constant evaporating pressure across the evaporator.

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<b>Controls and Instrumentation</b>	<b>All Models</b> <ul style="list-style-type: none"><li>- On/Off switch and dryer On light</li><li>- Colored dewpoint indicator</li><li>- Fan control temperature switch (from DS 25)</li></ul>

Component	Construction
<b>Electrical Supply</b>	<b>All models</b> <p>These models are available with the following standard voltage:</p> Main supply : 115V-1PH-60Hz ± 10% Electronic drain (opt.) voltage: 115V-1PH-60Hz ± 10%

Component	Construction
<b>Enclosure</b>	IP20 overall rating is standard on all units.

Component	Construction
<b>Construction &amp; Paint Finish</b>	<b>Panels</b> <p>All panels are in heavy mild steel, and have been baked and epoxy-polyester powder painted on both sides.</p> <b>Base</b> <p>The base is in heavy-duty mild steel, finished in baked epoxy powder paint coating.</p>
<b>Pipe Connections</b>	The compressed air inlet / outlet connections are steel for all models.

Component	Construction
<b>Packaging</b>	<b>All models</b> <p>The packaging is plastic wrap with a cardboard box mounted on a wooden pallet.</p>