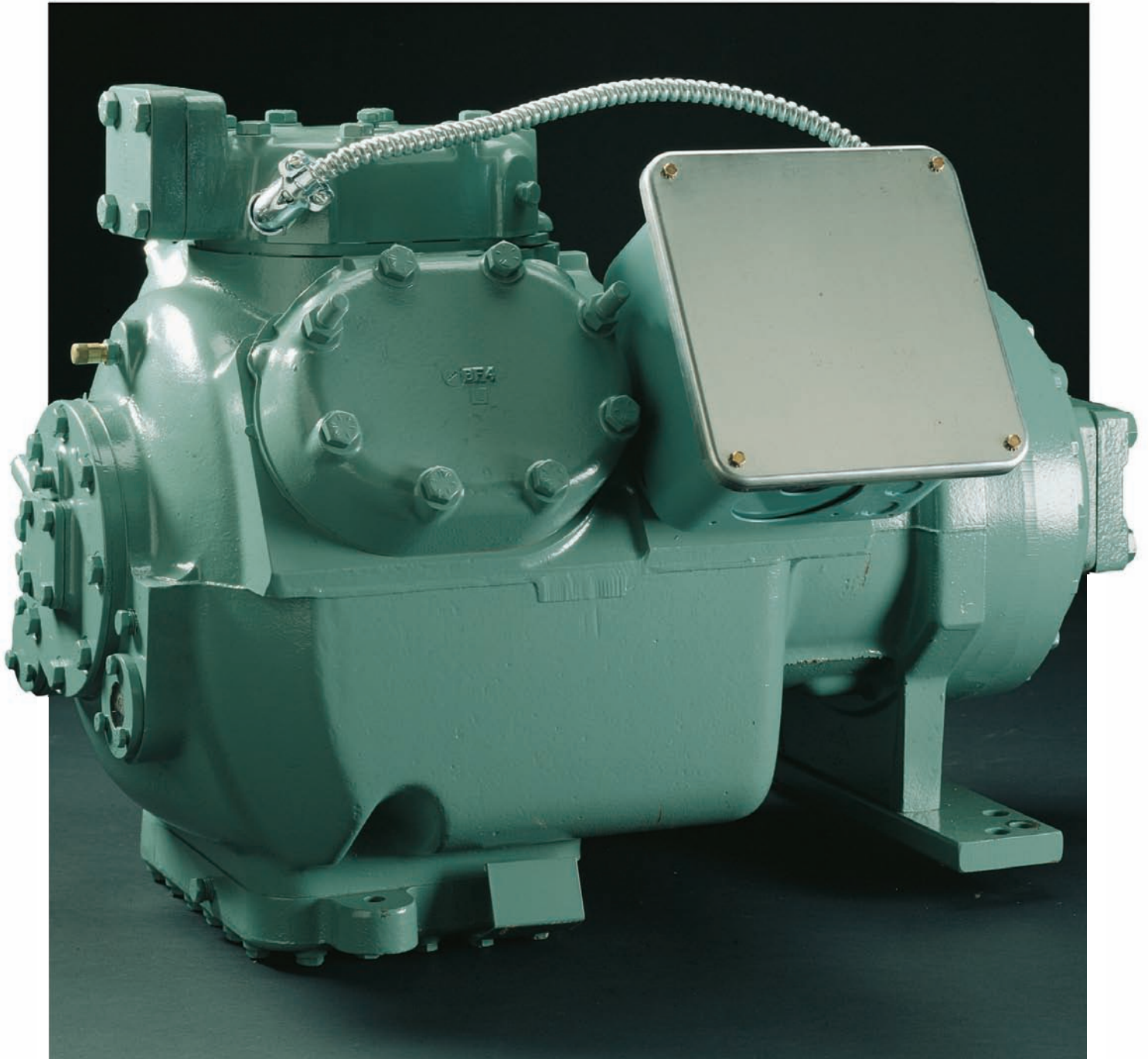




O 6 D / E APPLICATION GUIDE

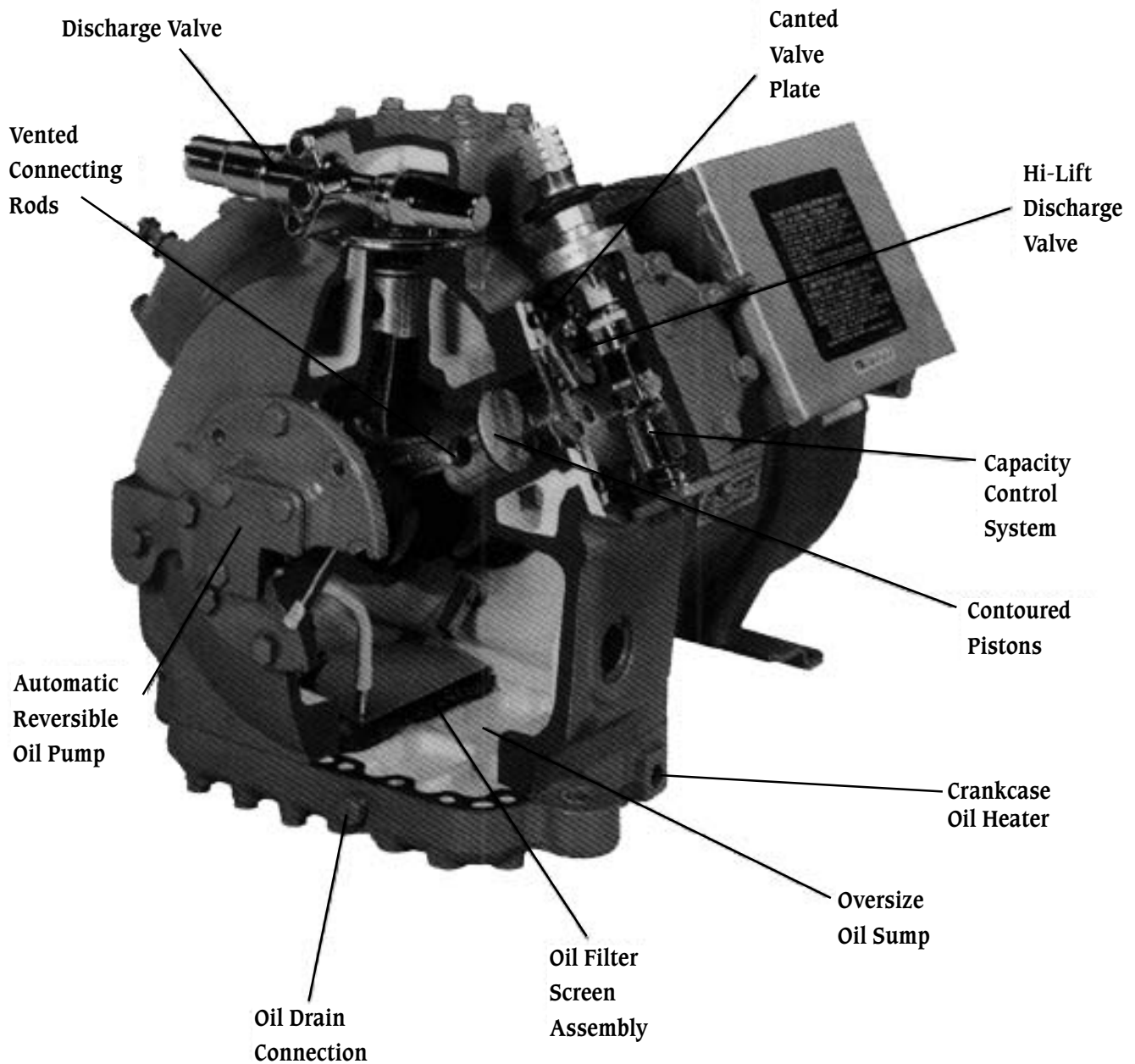


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General Information

Features of Carlyle 06D/E Compressors



Carlyle 06D/E semi-hermetic compressors are ideally suited for commercial refrigeration, air conditioning, process cooling, and environmental chambers. They are extremely flexible and may be used with many of the new HFC refrigerants such as R-507, R-404A, R-407C and R-134a, in addition to the conventional refrigerants (R-12, R-22, and R-502). The compressors may be operated at 50 or 60 hertz and are UL (Underwriters' Laboratories), CSA (Canadian Standards Association), and ISO 9002 approved. Many of the prominent features of the 06D/E compressors are listed below. 06D and 06E compressors comply with the CE Mark requirements and will have the CE Mark logo added to the appropriate compressor nameplates.

High Efficiency Valving System

The valving system utilizes low lift valves and high flow ports to reduce valve losses, maximize efficiency, and reduce valve stress. Carlyle's valves are made of Swedish steel, the finest material available for this application. Valve design has been qualified for HFC/POE applications and redesigned to avoid affects of "stiction".

Contoured Pistons and Vented Connecting Rods

The pistons are contoured allowing the suction valves to mate up with the recess in the pistons, resulting in reduced clearances which increases both capacity and efficiency. The connecting rods are also vented to provide premium bearing lubrication and longer life.

Automatic Reversible High Flow Oil Pump

The positive displacement vane type oil pump is extremely durable and produces a high volume of oil flow. With the new HFC refrigerants and POE (polyolester) oils (which are more soluble), the 06D/E oil pump will produce oil pressure quickly, reducing the potential for nuisance oil pressure trips.

Override Oil Sump

On start-up, oil level can temporarily drop too low, causing unnecessary wear in other compressor designs when on shut-down, the oil is diluted by refrigerant. The Carlyle override oil sump holds extra oil in crankcase to prevent normal oil migration from dropping the oil level below the safe lubrication range.

High Efficiency Heavy Duty Motors

These motors have the latest insulation systems which helps to prevent motor burnouts, especially during hot weather periods, when operating pressures, temperatures, and currents (amps) are high.

Suction Inlet Screen

The suction inlet screen prevents installation scale or abrasives from entering the compressor and shortening the life of the motor and compressor.

Override Suction Gas Passages

The override suction gas passages generate less turbulence, lower pressure drops and more efficient motor cooling by suction gas, thereby producing a cooler motor that has a more economical operation and longer life.

Main Bearings and Running Surface of Aluminum or Steel Backed Babbitt

Aluminum or tin based babbitt material is used on bearing surfaces to provide greater load carrying ability than other types of materials and are also less susceptible to damage from overheating or liquid refrigerant.

Crankcase Oil Heater

This optional accessory warms crankcase oil to reduce refrigerant migration which occurs during shutdown periods.

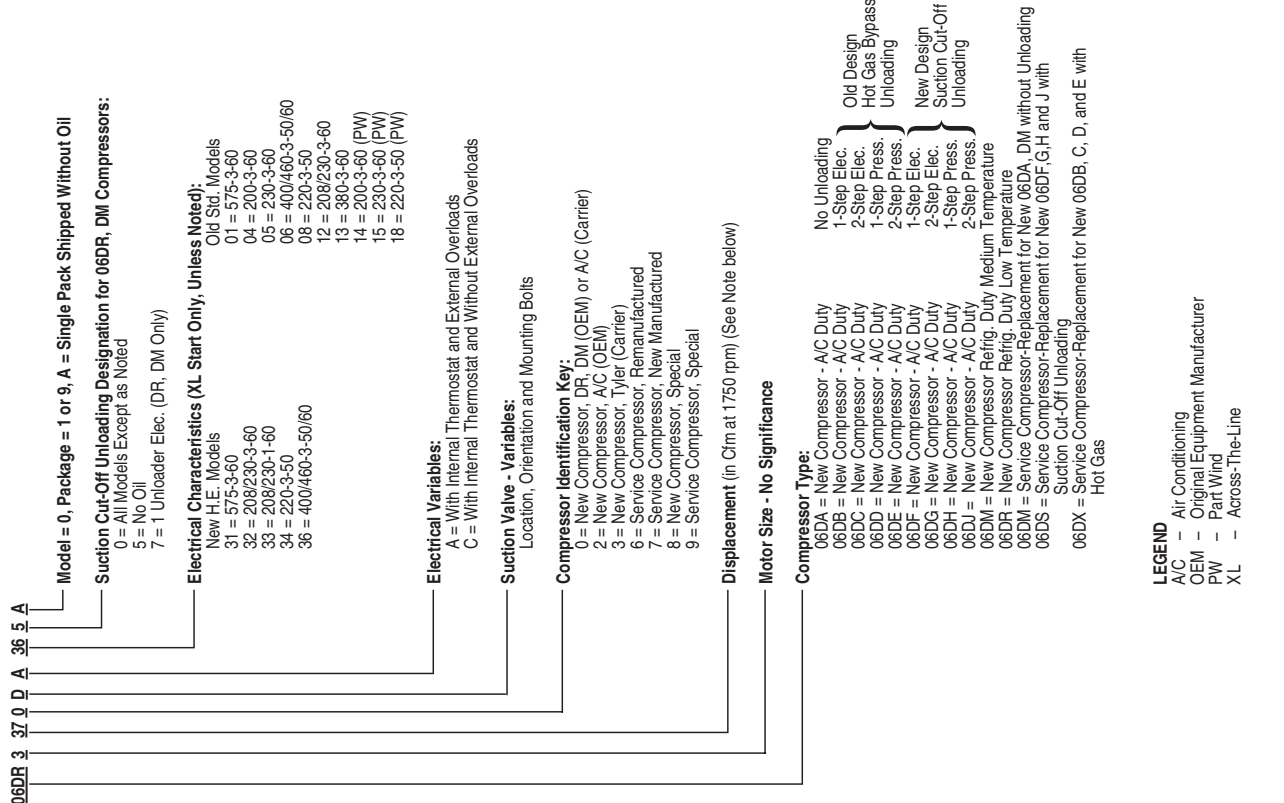
Capacity Control System

Suction cut-off unloading is an option on all four and six cylinder Carlyle 06D/E compressors. Suction cut-off unloading is an efficient method of capacity control that literally blocks off the suction of two cylinders at a time. This method is not only efficient, but results in much cooler operating temperatures than hot gas bypass style designs.

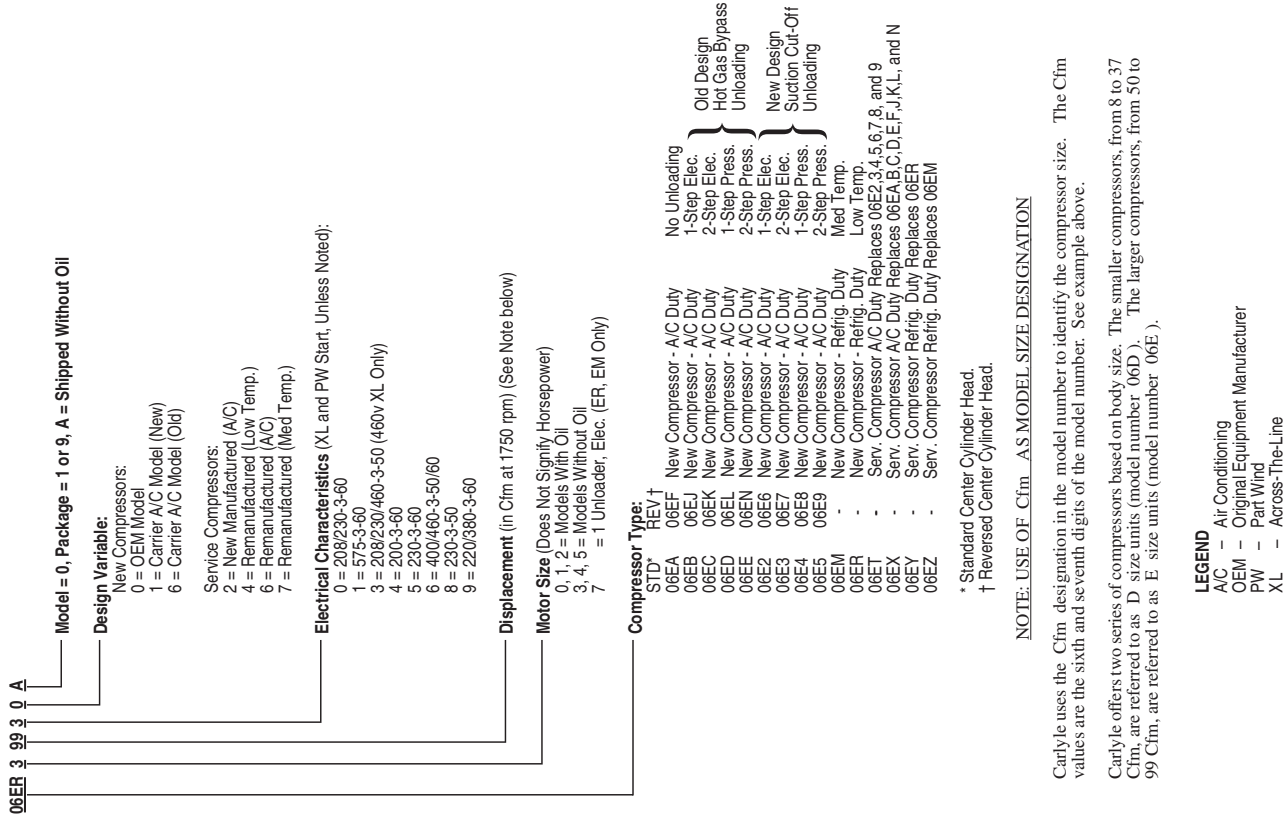
ISO 9002 Registration

Carlyle Compressor has ISO 9002 Registration by Underwriters' Laboratories, Inc. to manufacture 06D/E semi-hermetic reciprocating compressors ranging in size from 2 to 40 tons of refrigeration capacity. That means we have a top quality system in place and will be continually working to improve it. So you can be assured you will always be getting the highest quality compressors with Carlyle.

06D Compressor Model Number Significance



06E Compressor Model Number Significance





Manufacturer reserves the right to discontinue, or change at any time, specifications or designs and prices without notice and without incurring obligations.

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